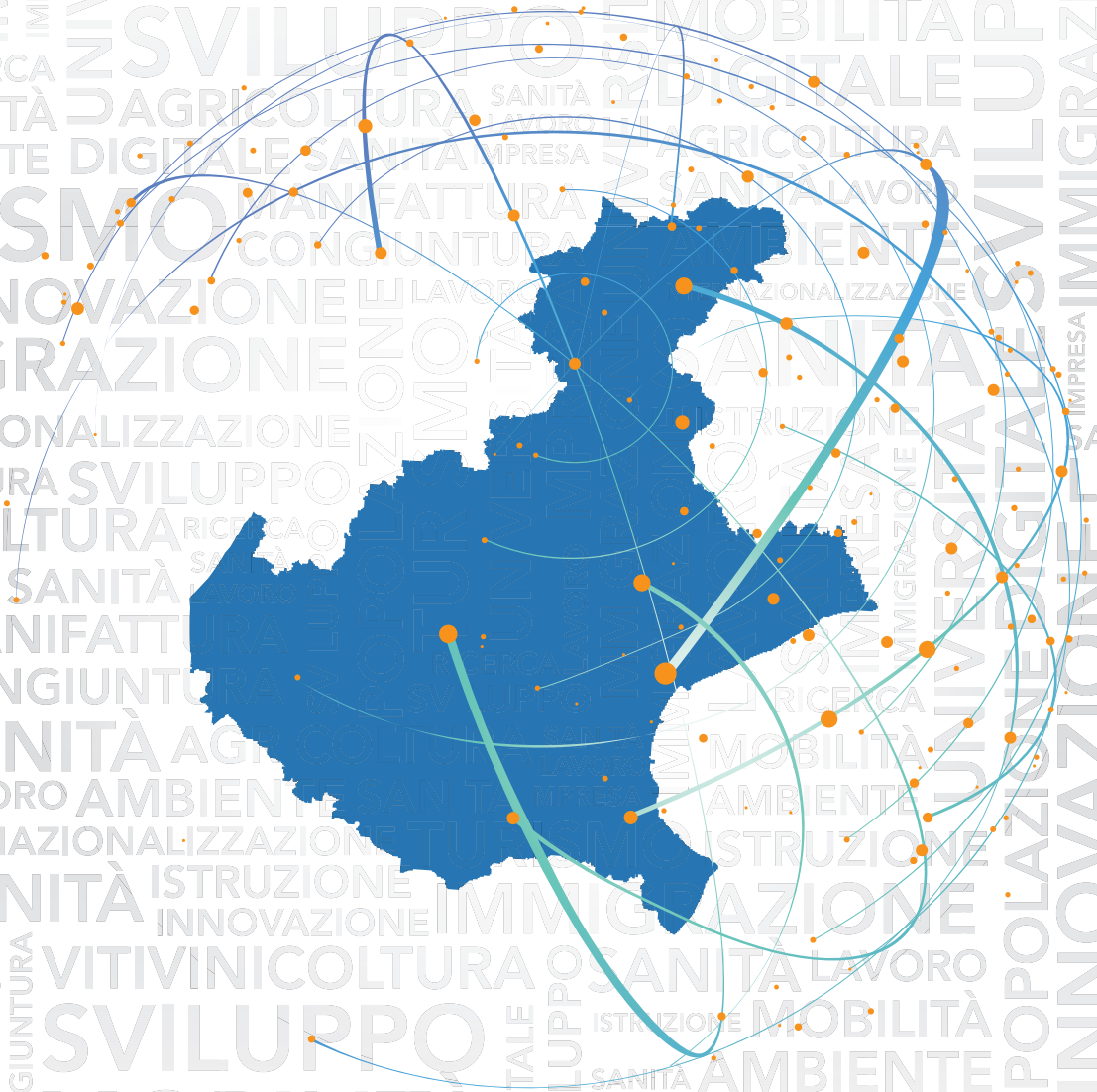
REGIONE DEL VENETO

STATISTICAL REPORT 2018

Veneto: A story to tell, like no other



SPECIALTY

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Regional Council Presidency
Directorate for International Relations, Communication and SISTAR
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Regional Statistical System O.U.

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This edition of the Statistical Report aims to investigate and enhance the "specialities" of Veneto, with the word "specialities" taking two different but complementary meanings.

In fact, "speciality" can be understood as being both the particular nature, the singular characteristic that makes a person, place or an event stand out compared to another more ordinary or usual aspect, and as a sector of human activity (from science to sport) that it is distinguished by particular characteristics or requires particular preparation or quality.

Both of these meanings (i.e., speciality in the singular and also specialities in the plural) are useful keys of interpretation to analyse the many social, economic and territorial facets of Veneto.

Focusing on what distinguishes Veneto and the people of Veneto allows us to grasp the profound identity of the region and its society and, therefore, to critically analyse the strengths and weaknesses of Veneto and understand the dynamics of its differentiation but also of its communion with respect to other Italian and European regions.

The issue is also particularly related to the request for autonomy of Veneto, which was strongly expressed in the referendum held on 22 October 2017 and on which the Regional Administration is negotiating with the National Government.

In a globalised world, knowing how to enhance the excellence of Veneto and the specific skills of its community, in all its components, is a determining factor of distinction and identity that opens up innovative and forward-looking development paths.

Luca Zaia

President of the Regione Veneto

Now in its fifteenth edition, the Statistical Report is, on the administrative side, the annual summary of a data collection, processing and analysis work carried out by the Regional Authority on the structural and economic situation of the region and, from a user's point of view, is a reference text for those who aspire to know Veneto and its dynamics in a transparent and documented manner.

Alongside the other products of regional statistics - which can be found on the regional website (http://www.regione.veneto.it/web/statistica) - this Report is the cornerstone of a varied dissemination activity implemented by the Regional Authority and aimed at returning the statistical information, as timely, relevant and reliable as possible, to the region and its stakeholders (citizens, families, businesses, institutions and associations).

In fact, in a global context where the real added value lies in knowledge, the need for information originating from society deserves to receive qualified answers from the public administrations, in the knowledge that statistical data is the property of the community from which it comes and not of the entities that manage it.

In trusting that this Report may answer many questions and perhaps arouse new and stimulating thoughts, I wish everyone a rewarding read.

Ilaria Bramezza
Secretary General of Planning
Regione Veneto

CONTENTS

THE SITUATION

Chap. 1. The economic context 10
1.1 The world scenario 11
1.2 Europe 15
1.3 Italy 17
1.4 1.4 The Veneto economy 21

THEME - SPECIALITIES

Chap. 2. Economic activities and specialities in demand from abroad 30
2.1 Businesses towards post-crisis recomposition 31
2.2 The situation of Veneto agriculture 38
2.3 Foreign trade is still growing 40
2.4 Foreign demand and business performance 46
2.5 Domestic trade: the dichotomy between digital and neighbourhood stores 53

Chap. 3. The uniqueness and variety of Veneto tourism 58
3.1 The variety of the offer: the five traditional and time-less offers 64
3.2 A trip to Veneto that goes beyond the norms 69

Chap. 4. Sustainable development and social inclusion, quality work required 74
4.1 Working: protection against social exclusion is not always guaranteed 75
4.2 Increasing income, consumption and ... inequality 82
4.3 Defeating poverty for sustainable development 85
4.4 The fragility of minors 88

Chap. 5. Youth special 92
5.1 Educational poverty 94
5.2 Investing in school and children is investing in the country's uture.
5.3 School as an opportunity for integration and inclusion 102
5.4 The educating community 106
5.5 More high-quality jobs for young people to curb economic and educational poverty 111

Chap. 6. Climate change 118
6.1 The temperature trend 120
6.2 Rainfall 128
6.3 The effects of climate change 132

Chap. 7. Veneto and sustainable mobility 136
7.1 People's daily movements 137
7.2 The impact of traffic on the environment 141
7.3 Sustainable mobility 144
7.4 Local public transport. A new planning season 147
7.5 7.5 Sustainable mobility and road safety: the phenomenon of road accidents in the city 150

FOCUS - THE YEAR OF ITALIAN FOOD

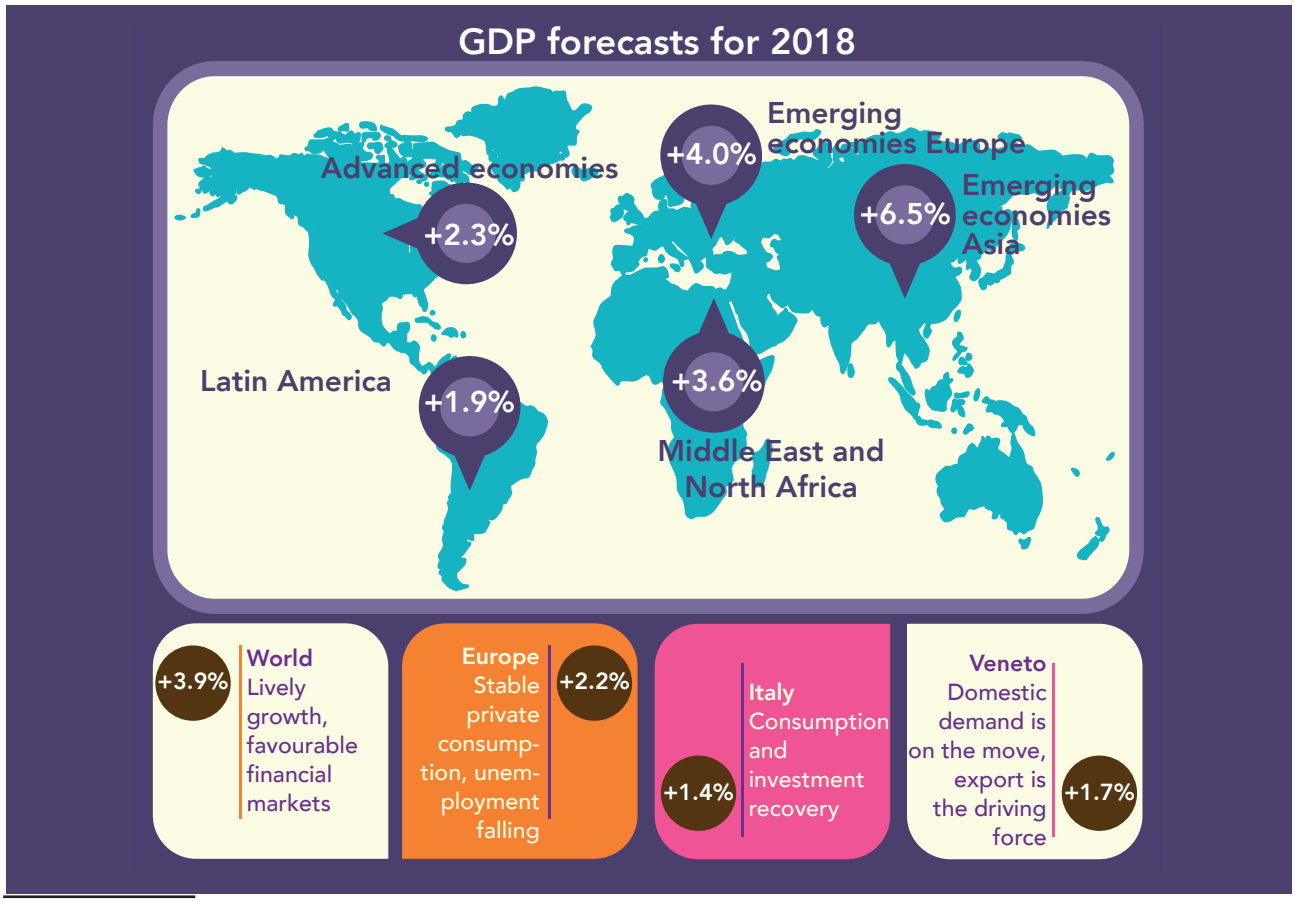
Chap. 8. The Year of Italian Food 156
8.1 High-quality products 157
8.2 Fishing in Veneto: tradition and identity in support of coastal areas 161
8.3 Agri-food exports: the continuous creation of products that cannot be delocalised 168
8.4 Territories known for their wine and food offer 179
8.5 The economic impact of the agri-food system 183
8.6 Agricultural employment in the catering industry 192
8.7 Responsible food production and consumption: why they are important 195

BIBLIOGRAPHY

THE SITUATION

CHAP.1 - THE ECONOMIC CONTEXT[1]

The first months of 2018 are encouraging: the world economy is going through a period of lively growth and the financial markets are going through a phase of significant earnings, a particularly favourable combination that has triggered the relaunch of even of the most difficult economies, such as the Italian one.
Global GDP growth for 2017 is now estimated at 3.7%. Positive surprises are particularly strong in Europe and Asia, but overall good results are reported for both advanced and developing markets. The International Monetary Fund predicts a global growth of 3.9% for 2018 and 2019, with advanced economies forecasting a growth of more than 2%.
In 2017, the European economy performed much better than expected, driven by buoyant private consumption, the strongest growth in the world and declining unemployment. Investment is also recovering thanks to favourable financing conditions and a considerably better and less uncertain economic climate. Overall, the European Union is expected to register a strong growth of +2.3% in 2017. The Eurozone is also expected to grow at a pace that breaks the previous decade's records, with real GDP expected to grow by 2.2%.
The European Commission's forecasts suggest that growth will continue in both the Eurozone and the EU as a whole, with percentage changes of 2.1% in 2018 and 1.9% in 2019.
In Italy, in 2017, a GDP of 1,716,238 million euros was recorded, an increase of 1.5% in real terms.
The Veneto GDP is estimated to grow by 1.6% in 2017, slightly above the national average. In the 2018 estimates, the recovery should continue in Veneto and at the national level, as the last months of the year give encouraging signs in terms of both increased consumption and increased investment.



[1] Data and forecasts available as of March 2018

2017 was characterised by a series of events that strongly influenced the international economic context: it was the year that Trump came into power and the development of his policy; the threats from the Korean Kim Jong Un and tensions between the United States; the territorial dismantling of ISIS; the biblical exodus of the Rohingya people from Myanmar; the rise of Xi Jinping as the undisputed leader of an increasingly powerful China; the independence of Catalonia; the first year of a Europe without Great Britain; the elections in Austria, Germany and France; the cryptocurrency boom; the historical stock market records; low interest rates; the upwards adjustment of all economic forecasts thanks to the recovery of the global economy.

1.1 Lo scenario mondiale

2018 opens with encouraging signs: the world economy is going through a period of lively growth and the financial markets are going through a phase of significant earnings, a particularly favourable combination that has triggered the relaunch of even of the most difficult economies, such as the Italian one. This all stems from a 2017 that saw the cyclical recovery, in progress since mid-2016, continue to strengthen.

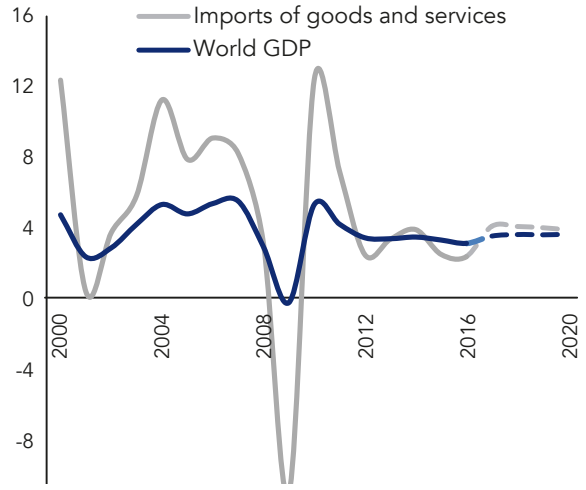
The world economy's positive phase is partly due to financial conditions that are very relaxed in general, as a result of the expansive monetary policies of recent months.

In 2017, the liquidity injected by central banks into the markets encouraged the stabilisation of long-term interest rates, also because a peculiarity of the current recovery is the absence of significant signs of a rise in inflation.

Another significant aspect is the fact that trade growth in 2017 was slightly higher than world GDP growth, breaking a long period of stagnation. This trend is due to the recovery of emerging countries and the strengthening of the investment cycle in some advanced economies.

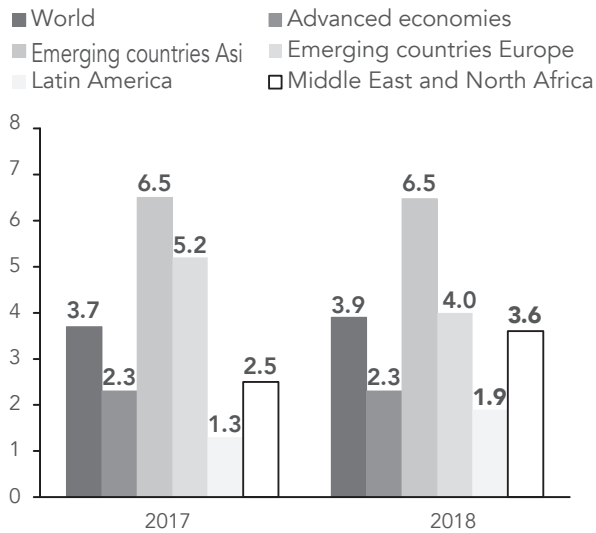
In the update of the World Economic Outlook of January 2018, which was held for the first time at the World Economic Forum in Davos, the International Monetary Fund stresses that global growth is accelerating, driven by advanced economies, starting with the USA, which is seeing the positive

Fig. 1.1.1 - Percentage variations of imports of goods and services and of world GDP - Years 2000: 2020



Source: Processing of data and forecasts from the International Monetary Fund by the Statistics Office of Regione Veneto

Fig. 1.1.2 - Annual percentage variations of the Gross Domestic Product. Country aggregations - Years 2017:2018



Source: Processing of data and forecasts from the International Monetary Fund by the Statistics Office of Regione Veneto

effect of the Trump tax reform.
The United States proves stronger than expected, given the greater external demand and the macroeconomic impact expected from the announced reduction of corporate tax rates and temporary compensation for the entire investment quota.

World economy is strengthened

The Monetary Fund expects that the decline in revenue World economy is strengthened economies, accounting for three quarters of the will not be offset by short-term spending cuts, but rather that tax reform will stimulate economic activities. world GDP, recorded a recovery in terms of growth on an annual basis, the largest synchronised increase in global growth since 2010. Among the advanced economies, growth in the third quarter of 2017 was higher than expected, particularly in Germany, Japan, Korea and the United States. The leading emerging markets and developing economies, including Brazil, China and South Africa, posted stronger growth in the third quarter than previous forecasts. Qualitative indicators also indicate strong upturns in the fourth quarter.
World trade grew strongly in the last few months of the year, supported by a recovery in investment, particularly among advanced economies, and by the increase in manufacturing output in Asia, in view of the launch of new smartphone models. Indicators show that manufacturing activity continues, consistently and with strong consumer confidence that indicates a robust final demand.
Global growth for 2017 is now estimated at 3.7%. Positive growth surprises are particularly strong in Europe and Asia, but overall positive results are reported for both advanced and developing markets. The International Monetary Fund predicts a global growth of 3.9% for 2018 and 2019, with advanced economies forecasting a growth of more than 2%. This forecast reflects the expectation that favourable global economic conditions will help keep the recent acceleration in demand, especially in investment, with a significant impact on export growth. Furthermore, the US tax reform, with the associated tax stimulus, is expected to As a consequence, domestic demand is expected to grow and drive imports. Overall, the effect of this policy is expected to lead to a 1.2% increase in 2020, compared to the absence of this reform. Ultimately, US GDP is expected to grow 2.7% in 2018 and 2.5% in 2019.

Positive effects of the US tax reform

Growth rates in the last quarter of the year are also higher than expected in many Eurozone economies especially in Germany, Italy and the Netherlands, reflecting stronger domestic demand and higher foreign demand. Growth in Spain, which was well above the potential, was slightly reduced in the 2018 forecasts, influenced by the effect of increasing political uncertainty on trust and demand.
Advanced Asian economies, especially those sensitive to the evolution of trade and global investments, are benefiting from international growth. This is the case for Japan, which recorded a + 1.8% in 2017.

The Eurozone is better than expected

The aggregate of emerging and developing countries in Asia[2], which grew by around 6.5% in 2017, will keep the pace for the years 2018-19 as well. This region continues to represent more than half of global growth. Within it, the growth rate in 2017 was higher for China, +6.8% and India, +6.7%.
In emerging and developing Europe[3], where with favourable repercussions on demand for its trading partners, particularly Canada and Mexico, during this period. In 2017, Positive effects of the US tax reform The economy of the Growth is estimated to exceed 5% in 2017, activity in 2018 and 2019 is expected to remain strong, driven in particular by Poland and Turkey and sensitive to a favourable external environment, with good financial conditions, greater demand for exports from the Eurozone and, for Turkey, an accommodating policy.

Optimism for emerging economies

In Latin America, after + 1.3% in 2017, recovery should strengthen, with growth of 1.9% in 2018

2 Bangladesh, Bhutan, Brunei, Darussalam, Cambodia, China, Fiji, India, Indonesia, Kiribati, Lao P.D.R., Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-este, Tonga, Tuvalu, Vanuatu, Vietnam
3 Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, FYR Macedonia, Montenegro, Poland, Romania, Serbia, Turkey

and 2.6% in 2019. This variation mainly reflects an improved outlook for Mexico, which benefits from stronger demand from the US, a stronger recovery in Brazil, favourable effects of commodity prices and easier financing conditions for some commodity-exporting countries.
Growth in the Middle East, North Africa, Afghanistan and Pakistan was 2.5% in 2017, and in 2018 and 2019 it will be around 3.5%. While stronger oil prices are helping a recovery in domestic demand among oil exporters, including Saudi Arabia, the planned tax adjustment is expected to weigh on growth prospects.
Growth in Sub-Saharan Africa is confirmed at 2.7% in 2017, 3.3% in 2018 and 3.5% in 2019, while the outlook for South Africa is more contained, where growth is expected to remain below 1% in 2018-19, as greater political uncertainty weighs on trust and investment.
"We are finally seeing the global economy picking up the momentum that we hope is going to be sustained in the medium and longer term", explains Christine Lagarde, Managing Director of the IMF, who nonetheless also expresses some concerns.
In fact, the IMF warns against the risks of the ideal scenario: among them are the excessive prices of financial assets, such as actions, protectionism, geopolitical tensions and natural disasters linked to climate change.
The world economy's positive signals can also be seen in the trend on some commodities prices that are more sensitive to the evolution of global demand, such as metals, oil, copper and aluminium.
Even gold, although exposed to the ups and downs of the US monetary squeeze, is about to end 2017 with strong increases.
Actually, the commodity markets have lived a two-faced year, only satisfying those who bet on oil and metals, while the prices of agricultural products have sunk. The aspect characterising exchange rates in 2017 is the weakening of the dollar after its strengthening in the period immediately following the presidential election.
The dollar weakens as the Fed interrupts the upswing phase, as well as the progressive (temporary?) abandonment of electoral programmes by the US President (reduced size of the fiscal impulse, and withdrawal of the programme to increase trade barriers), and the cycle's strengthening signs that emerged during the year in other areas of the world economy4. Furthermore, positive news for the Eurozone economy is further supporting the European currency.

The weakening of the dollar

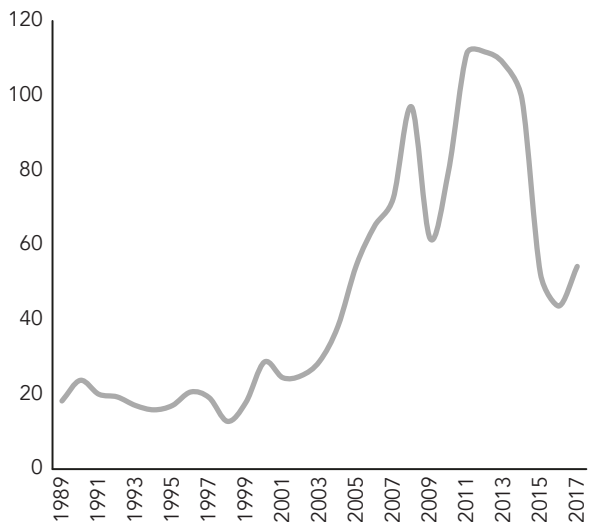
The weakening of the dollar also stabilised the financial conditions of many emerging economies in 2017. In fact, international capital returned to these countries, interrupting the fall of respective currencies that has been going on for several years. Stabilisation of the exchange rate allows those economies whose exchange rates had depreciated most to soothe inflation concerns.
It is to be seen whether in 2018 the Fed's rate hikes will determine a new strengthening of the dollar.

Tab.1.1.1 - Economic indicators in the main industrialised countries - Years

	GDP (% var.)				Internal demand (% var.)				Inflation				Unemployment rate			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
United States	1.5	2.3	2.7	2.5	1.7	2.4	2.5	2.4	1.3	2.0	2.1	2.2	4.9	4.5	4.3	4.1
Japan	0.9	1.8	1.2	0.9	0.4	1.7	1.2	1.1	-0.1	0.4	0.8	1.2	3.1	2.9	2.8	2.7
Euro zone	1.8	2.2	2.1	1.9	2.3	2.2	2.1	1.9	0.2	1.5	1.4	1.6	10.0	9.1	8.5	7.9
UK	1.8	1.5	1.3	1.1	2.1	0.9	1.0	1.0	0.7	2.7	2.6	2.1	4.8	4.5	4.7	4.8
EU27	2.0	2.4	2.2	2.0	2.4	2.4	2.3	2.0	0.2	1.6	1.5	1.8	9.1	8.2	7.7	7.2

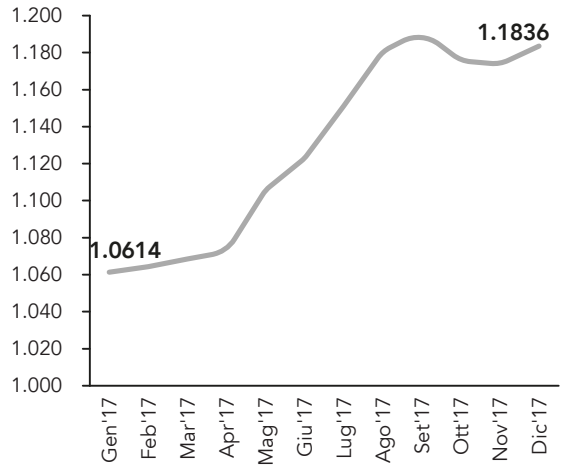
Source: Elaborations by the Statistics Office of the Veneto Region on data and forecasts, in red, International Monetary Fund, Eurostat and European Commission

Fig. 1.1.3 - Brent oil price ($/barrel) – Years 1989:2017



Fonte: Elaborazioni dell'Ufficio di statistica della Regione del Veneto su dati EIA - U.S. Energy Information Administration

Fig. 1.1.4 - The euro dollar exchange rate - Jan 2017: Dec 2017



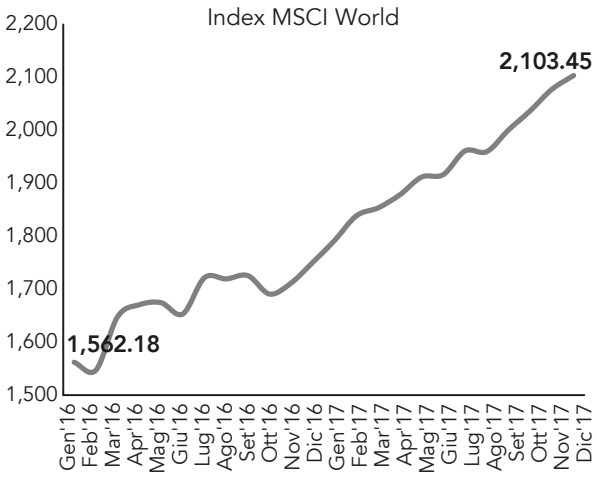
Fonte: Elaborazioni dell'Ufficio di statistica della Regione del Veneto su dati Eurostat

In 2017, stock markets favourable mix: profits increased as a result of the recovery, interest rates were low and the risk premium was reduced. The cumulative changes in prices during the year are very high for all markets.

Overall, the stock[4] markets are still underpinned by a number of elements: in particular, the strengthening of the global economy could lead to buoyant profit growth in 2018; on the other hand, the effect of interest rateincreases should be very gradual and modest on the whole. In addition, while the positive development of the world economy was partly a positive "surprise" for investors, 2018 is marked by more optimistic forecasts: in fact, growth is now reflected in stock prices.

The global stock market boom

Fig. 1.1.5 - World equity markets: MSCI World index - Jan 2016:Dec 2017



Fonte: Elaborazioni dell'Ufficio di statistica della Regione del Veneto su dati MSCI

1.2 Europe

In 2017, the European economy performed much better than expected, driven by buoyant private consumption, the strongest growth in the world and declining unemployment. Investment is also recovering thanks to favourable financing conditions and a considerably better and less uncertain economic climate. The economies of all

4 Congiuntura Ref, 9 January 2018

Member States are expanding and their labour markets are improving, although wage growth remains contained.
The European Union as a whole is expected to grow strongly by 2.4% in 2017.
The Eurozone is also expected to grow at a pace that breaks the previous decade's records, with real GDP expected to grow by 2.2%.
The European Commission's forecasts from autumn 2017 suggest that growth will continue in both the Eurozone and the EU as a whole, with percentage variations of 2.1% in 2018 and 1.9% in 2019 (the spring forecasts indicated 1.8% in the Eurozone and 1.9% in the EU for 2018).
In particular, growth in the Eurozone is equal to or higher than that of other major advanced economies: considerable slack in the labour market. Our policies need to remain firmly focused on making growth sustainable and inclusive. This means stability-oriented macroeconomic policies and reforms to boost productivity, adaptability to change and to ensure that the benefits of growth are spread widely across our societies."

Widespread growth in EMU

Pierre Moscovici, Commissioner for Economic and Financial Affairs, Taxation and Customs, said: "After five years of moderate recovery, European growth has now accelerated..... Yet challenges remain in the form of high debt levels and subdued wage increases. A determined effort from Member States is needed to ensure that this expansion will last and that its fruits are shared equitably. Moreover, structural convergence and the strengthening of the euro area are necessary to make it more resilient to future shocks and to turn it into a true motor of shared prosperity."
The cyclical recovery, which has been continuous for 6 years, therefore remains incomplete, as it is accompanied by a still non-dynamic labour market and unusually low wage growth. This is why GDP growth and inflation still depend on political support. The European Central Bank has maintained a very accommodating monetary policy, while some other central banks around the world have begun to raise interest rates. Some Eurozone Member States are expected to adopt expansionary budgetary policies in 2018; however, the Eurozone's overall stance in this field is expected to remain broadly neutral. Job creation has been steady and labour market similar to the United States and better than Japan. British growth last year also fell below that of the Eurozone.
Valdis Dombrovskis, Vice-President of the European Commission, in charge of Euro and Social Dialogue, also in charge of Financial Stability, Financial Services and Capital Markets Union, said: "The EU economy is performing well overall.... investment is picking up and government deficit and debt are gradually decreasing. There are also signs of a resumption of a process of convergence in real incomes. There are however significant differences across Member States, with some of them still experiencing benefit from the expansion caused by internal demand, moderate growth of wages and the structural reforms put in place in some Member States. The unemployment rate in the Eurozone is expected to average 9.1% in 2017, reaching its lowest level since 2009, with a record number of total employed. Unemployment is expected to fall further to 8.5% in 2018 and 7.9% in 2019 over the next two years. In the EU, the unemployment rate is estimated at 7.7% in 2017, 7.2% in 2018 and 7.0% in 2019. Job creation could slow down due to the suspension of temporary tax incentives in some countries and the emergence of skill shortages in others.
The year just ended also confirms the hierarchy of the growth rates of the major European countries observed in previous years: the recovery of the Spanish economy is continuing to exceed the most optimistic expectations; Germany is maintaining a solid expansion trend; France and Italy continue to maintain lower growth rates.
In particular, Germany's GDP has almost returned during the first nine months of the year due to the effects of the energy base. By contrast, core inflation, which does not take into account energy and unprocessed food prices, is increasing but remains weak due to the protracted period of low inflation, low wage growth and the persistent stagnation in the labour market. Overall, inflation is estimated at 1.5% in 2017 in the Eurozone and 1.4% in 2018, and should rise to 1.6% in 2019.

Unemployment continues to decrease

Risks that economic developments could turn out better or worse than expected are balanced. The main downside risks are external and stem from high geopolitical tensions (e.g., in the Korean Peninsula), possible tighter global financial conditions (e.g., due to increased risk aversion), economic adjustment in

China or the extension of protectionist policies. In the European Union, the risks relate to the outcome of the Brexit negotiations, a stronger appreciation of the euro and an increase in long-term interest rates.

Inflation is expected To remain modest

Conversely, less uncertainty and a better climate in Europe could lead to stronger than expected growth, as well as stronger growth in the rest of the world. to pre-crisis levels, which are still a long way away for the Eurozone and Italy. In 2017, Germany grew by 2.2%, like the Euro Area average and is expected to continue growing to 2.1% in 2018 and 2% in 2019. Spain closes 2017 at + 3.1% with forecasts of + 2.5% for 2018 and + 2.1% for 2019. Ireland records a variation in GDP of + 4.8% in 2017 and forecasts are + 3.9% and + 3.1% for the following years.
The countries of Northern Europe all show above-average growth.
France, Italy and Greece lower the average European growth rate to around + 1.5% in 2017.
Public finances in the Eurozone are expected to heal mainly thanks to the picking up of growth. The nominal balance of public administrations should improve in almost all Member States. If policies remain unchanged, the government deficit to GDP ratio in the Euro Area should fall to 1.1% in 2017, 0.9% in 2018 and 0.8% in 2019, while the government debt to GDP ratio should fall to 89.3% in 2017, to 87.2% in 2018 and 85.2% in 2019.
The expansive dynamics of economic activity in 2017 will be combined with monetary stimulus still favourable in the next year, resulting in a significant growth in GDP. As a result, even with domestic prices that are only slowly recovering, an improvement in the EMU budget balance is estimated, both in terms of GDP and in structural terms.
These are positive results, and similar figures were only observed in the EMU creation stage, in the year 2000, thanks to the one-off proceeds from the sale of UMTS licences5 and the culmination of the expansionary cycle before the major crisis in 2007. However, the reduction of the government deficit in recent years has not been driven by discretionary measures that have structurally adjusted the budget balances; the adjustment is essentially favoured by the business cycle and lower interest expenditure.
However, the situation remains different in the different countries. On the one hand, German government debt in 2020 will have reduced by around 130 billion euros compared to 2016 levels (almost 200 compared to the 2012 peak). On the other hand, the remaining large countries, France, Spain and Italy, will record a slow debt adjustment,

Public finances benefit from an improvement in the cyclical conditions

which does not put this indicator on a decidedly downwards path. Some economists suggest that, in the presence of a stage of solid and generalised activity expansion, the priority should no longer be stabilisation but rather the opportunity to increase the focus on sustainability and create increase budget surplus.

Tab.1.2.1 - Economic indicators in major Eurozone countries - Years 2016:2019

	GDP (% var.)				Internal demand (%var.)				Inflazione (a)				Tassi di disoccupazione			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Germany	1.9	2.2	2.1	2.0	2.4	2.4	2.4	2.1	0.4	1.7	1.5	1.6	4.1	3.7	3.5	3.2
France	1.2	1.6	1.7	1.6	1.9	1.9	1.8	1.7	0.3	1.1	1.2	1.5	10.1	9.5	9.3	8.9
Spain	3.3	3.1	2.5	2.1	2.6	2.5	2.3	1.9	-0.3	2.0	1.4	1.5	19.6	17.4	15.6	14.3
Italy	0.9	1.5	1.4	1.0	1.1	1.6	1.5	1.1	-0.1	1.4	1.2	1.5	11.7	11.2	10.9	10.5

a) Harmonised index
Source: Processing of data and forecasts, in red, from the International Istat, Eurostat and the European Commission by the Statistics Office of Regione Veneto

1.3 Italy

2017 was an intense year for economic policy. Let us just mention some of the overriding factors: after a lively debate in the first three months of 2017, a stop was made to the vouchers, abolished both for businesses and families; the introduction of the REI, the "Inclusion Income" benefit aimed to fight poverty that citizens meeting the requirements can request from 1 December in their municipality of residence; the second part of the year was instead marked by banking crises, the preventive recapitalisation of MPS, the return of MPS to the hands of the Treasury, the liquidation of Bpvi and Veneto Banca, then 'absorbed' by Intesa SanPaolo. Finally, 2017 closes with a pre-election manoeuvring, i.e., the latest provision by the Gentiloni Government.

In 2017, the GDP in Italy was equal to 1,716,238 million euros, showing a growth of 1.5% in real terms; in 2016 there was a growth of 0.9%.

On the domestic demand side, in 2017, in real terms,

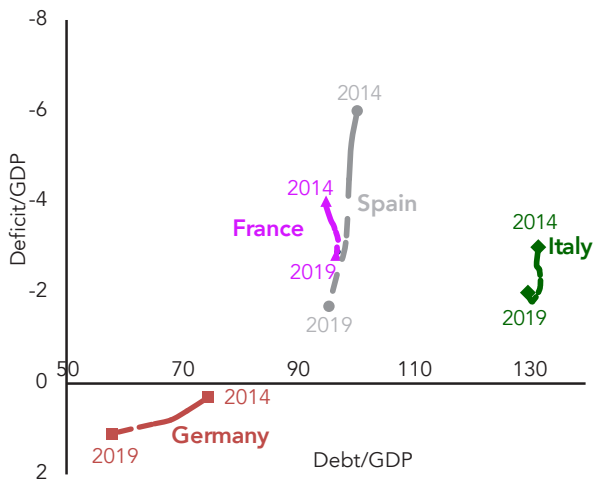
there was a 1.1% increase in the domestic final consumption and a 3.7% increase in GFCF. In terms of foreign flows, exports of goods and services increased by 7.4% and imports by 9%.

Domestic demand contributes positively to GDP growth by 1.5 percentage points (1.3 gross of stock variations) and net foreign demand by 0.2 points.

Final consumption expenditure of resident households grew by 1.3% (+ 1.4% in 2016). Expenditure on the consumption of goods increased by 1.2%, and that for services by 1.6%.

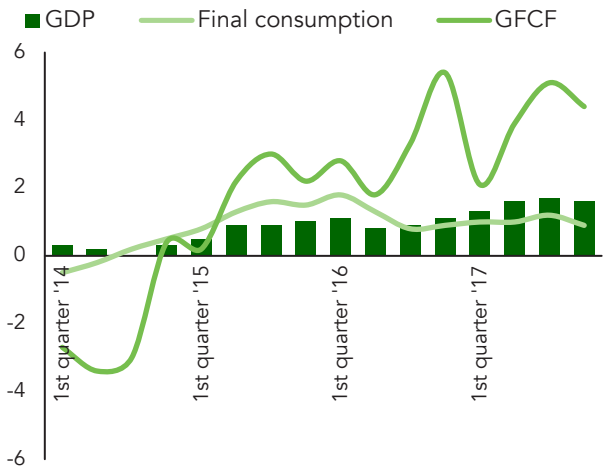
In terms of consumer functions, the most noticeable increases are related to communications expenditure (5.0%); furniture, home appliances and home maintenance (2.5%); hotels and restaurants (3.6%); and education (3.0%). The only component that shows a decrease is expenditure on alcoholic beverages, tobacco and narcotics (-1.3%). General expenditure of public administrations recorded an increase in volume of 0.1%, while that of private social institutions (PSIs) increased by 1.4%. GFCF is the most dynamic component of demand, with an increase of 3.7%, which is higher than the previous year (3.2%). There were increases for all components: 35.5% for investments in means of transportation, 2.0% in machinery and equipment, 1.4% in intellectual property products and 1.1% % for investments in construction.

Fig. 1.2.1 - Public deficit and debt in the major Eurozone economies - Years 2014:2019



Source: Processing of data from Eurostat and the European Commission's forecasts by the Statistics Office of Regione Veneto

Fig. 1.3.1 - Percentage variation in GDP, final consumption and investments in the respective period of the previous year. Italy - 1st quarter 2014:4th quarter 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Public finance

At the sectoral level, value added increased in industry in the strict sense (2.0%), in service activities (1.5%) and in construction (0.8%). The value added, on the other hand, fell by -4.4%, in agriculture, forestry and fishing.

Annual Labour Units (ALUs) increased of 0,9%, with a notable increase of 2.1% in the number of employees and a decline of -1.8% in the number of the self-employed. The growth in ALUs concerns all macro sectors, with the exception of agriculture, forestry and fishing, where a decrease of 1.2% was recorded; employment increases by 1.1% in construction, 1.3% in industry in the strict sense and 1.0% in services. Employment income and gross wages increased by 2.3%. Gross wages per capita increased by 0.2% in the total economy. The increase is 0.8% in the agricultural sector, 0.2% in services, 0.4% in industry in the strict sense, while there is a -1.4% decline in construction.

Italian growth is exceeding expectations

General Government net borrowing, measured in relation to GDP, is equal to -1.9%, compared to -2.5% in 2016. In absolute terms, debt amounted to -33,184 million euros, down by approximately 8.5 billion euros compared to the previous year.

The 2017 result does not account for the effects of the "Urgent provisions for the compulsory administrative liquidation of Banca Popolare di Vicenza SpA and Veneto Banca SpA"; in order to define these, we are awaiting the Eurostat assessment, requested by formal procedure.

The primary balance (net borrowing minus interest expenditure) measured in relation to GDP, was positive and amounted to 32,150 million euros, with an impact on GDP of 1.9% (in 2016 it was 1.5%).

The current account balance (General Government savings or deficit) is positive and amounts to 22,187 million euros, compared to 9,076 million in 2016. This improvement is the result of an increase in current revenues of around € 14.4 billion and an increase in current expenditure of around € 1.3 billion.

In 2017, General Government total revenue increased by 1.6%, as compared to the previous year. The impact on GDP is equal to 46.6%. Current revenues recorded a growth of 1.8%, equal to 46.3% of GDP. In particular, indirect taxes increased by 2.3% mainly due to strong VAT growth. Direct taxes also increased, + 1.2%, driven by the positive performance of the IRPEF (personal income tax). Actual social contributions show an increase by 2.6%, as compared to 2016. The sharp decrease in capital revenue (-29.4%) is mainly due to the absence of revenue from the emergence of financial assets and property-related assets held abroad (voluntary disclosures).

The total tax burden (amount of direct, indirect and capital taxes and social contributions in relation to GDP) is 42.4%, down by 0.3 percentage points compared to 2016.

In 2017, total General Government expenditure increased by 0.5% as compared to 2016. In relation to GDP, they are equal to 48.6%. Within these, current expenditure increases by 0.2%. Social cash benefits increased by 1.7% (1.1% in 2016), due to a moderate increase in pension benefits and a more marked increase in welfare benefits. Other current expenditure decreased by 9.5%.

Interest expense decreased by 1.7% after the reduction of 2.3% in 2016. Capital expenditure increased by 4.6% due to the strong increase in capital transfers to businesses, partly offset by the reduction (-5.6%) in gross fixed capital.

Industrial activity

On average in 2017, industrial production increased by 3.0% as compared to the previous year, almost double the growth recorded in 2016 (+ 1.7% compared to 2015).

The main support to manufacturing industry comes from the durable consumer goods sectors, followed by capital goods.

Industrial production accelerates...

Among the sectors that showed significant increases in production were pharmaceuticals (+ 7.4%), transport manufacturing (+ 5.6%) and machinery manufacturing (+ 4.6%).

On average in 2017, turnover adjusted for calendar effects, recorded an increase in value of 5.1%, reflecting a 4.6% growth on the domestic market and 6.1% on the foreign market.

And turnover

The highest growth in turnover was recorded for energy-related goods (+ 13%) and intermediate goods (+7.4%); the manufacturing sector recorded an increase of +3.3%.

The raw order index increased by + 6.6% compared to 2016, fairly balanced between domestic and

foreign orders.beginning to accelerate, but households' and businesses' perception of the economic framework is also improving, as reported by the growing trend of confidence indices.

The climate of confidence in Italy improves

The composite index of business confidence, which includes the opinion of entrepreneurs from across all sectors, improved throughout 2017 thanks to the optimism of manufacturing and the recovery of the construction sector. Only December saw slight uncertainty.

For manufacturing businesses, there was an improvement in opinions on orders and production expectations during the year, as well as on the turnover of goods intended for export. In the construction sector, order expectations are improving.

Even in the service sector, the climate of opinion is gradually becoming optimistic: in the first part of the year confidence continued to rise; there was a fall in the retail sector in January, but this was followed by a recovery.

Household confidence is improving in all its components, i.e., consumers' opinions on the country's economic situation over the last 12 months and expectations about the country's future economic situation.

The 2017 result is attributable to a good performance by Veneto industry, which remained competitive and showed an increase in the value added of 2%, good growth in services with + 1.6% and a recovery in construction of + 1.4%.

As regards the labour market, Veneto recorded an employment rate of 66% and an unemployment rate of 6.3%; Veneto therefore was once again among the leading regions in Italy, with the second lowest unemployment rate.

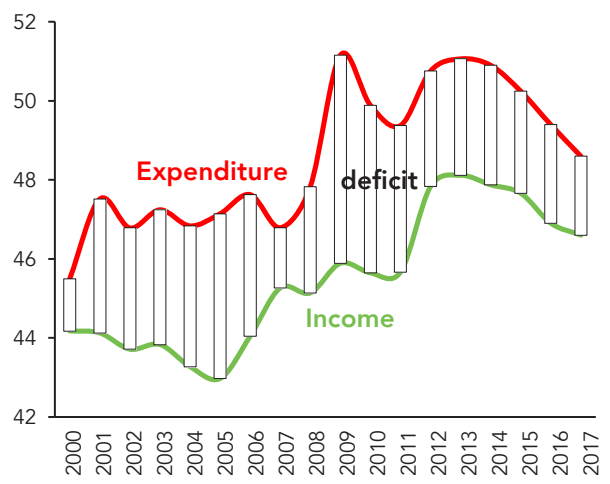
1.4 The Veneto economy[5]

Official regional accounting data are available up to 2016; therefore, for the analysis of 2017/2018, we refer to estimates and forecasts from the Prometeia Research Institute.

Domestic demand is moving away from the

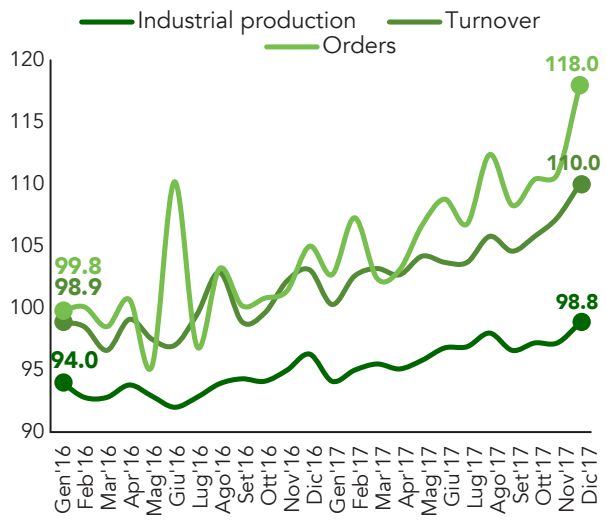
5 Universal Mobile Telecommunications System, technology that allows mobile phones to send and receive data over the Internet.

Fig. 1.3.2 - Revenue and expenditure of the GG (% of GDP). Italy - Years 2000:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 1.3.3 - Seasonally adjusted indices of industrial production, turnover and orders (base year 2010=100). Italy - Jan 2016: Dec 2017



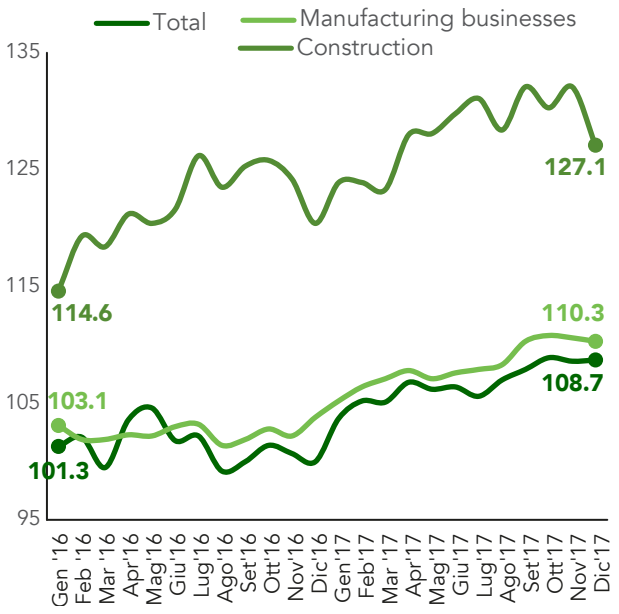
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

stagnation of the post-crisis years: household consumption rose by 1.5% and investment is expected to rise by 3.9%.
According to estimates for 2018, the recovery should continue in Veneto and at the national level, as the last months of the year give encouraging signs both in terms of increased consumption and investment of wealth, after Lombardy and Lazio: 9.2% of the national Gross Domestic Product is produced in Veneto. The GDP per inhabitant of Veneto in 2016 was 31,730 euros at current values, 14% higher than the national figure. The 2017 estimates show the positive evolution of the main economic variables in recent years and in particular from 2013, the year in which the Veneto economy reached its lowest point. The pre-crisis levels of 2007 - when the Veneto economy reached

2017 is good and..

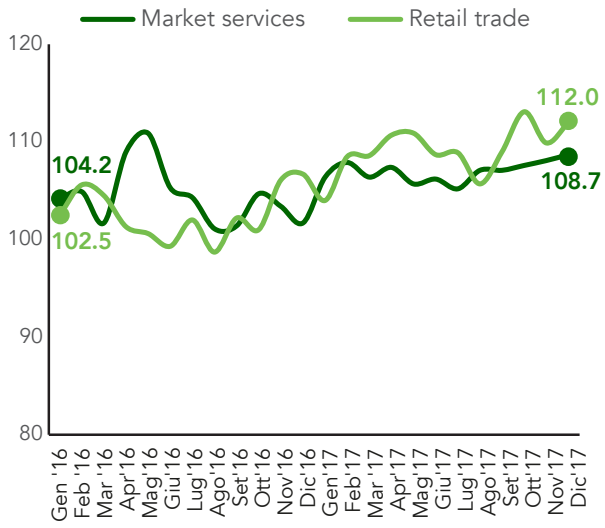
... for 2018 still positive signs

Fig. 1.3.4 - Monthly balance of confidence of total businesses and of manufacturing and construction businesses (seasonally adjusted data, 2010=100). Italy - Jan 2016:Dec 2017



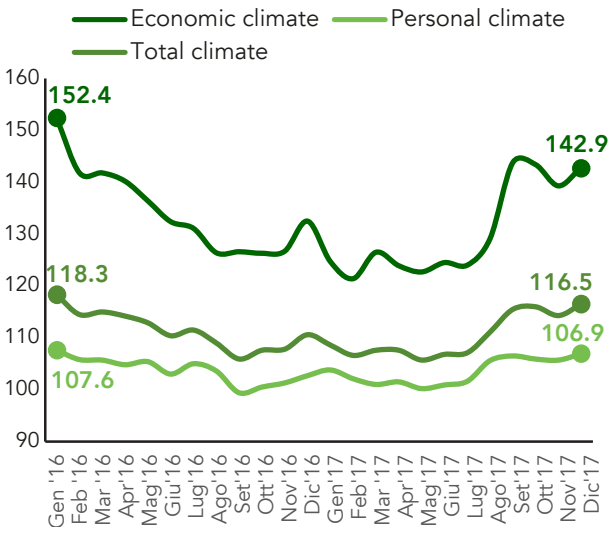
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 1.3.5 - Monthly balance of business confidence for market services and retail trade (seasonally adjusted, 2010=100). Italy - Jan 2016:Dec 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 1.3.6 - Monthly balance of consumer confidence (seasonally adjusted data, 2010=100). Italy - Jan 2016:Dec 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

its peak - have not yet been reached, but the 2013 levels have been amply exceeded.
From a sectoral point of view, Veneto remains a region with a strong industrial vocation. Manufacturing is an important backbone, both in terms of workforce and in terms of wealth production, and wealth is increased by the important volume of international trade: the share of wealth produced by industry in the strict sense is about 26%. In particular, globalised manufacturing supported the Veneto economy during the crisis years through export growth, and the industrial sectors with the greatest technological innovations, experienced unexpected developments.

Veneto is the third region for the production of wealth

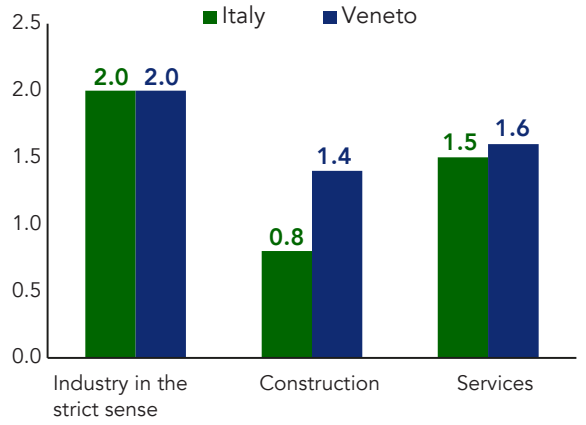
The qualitative surveys for 2017 record an increase in overall turnover, to such an extent as to consider it the best result of the last six years for the Italian manufacturing industry, confirming the robustness of the current economic cycle. This success raises expectations of a favourable trend for the current year as well, as confirmed by the peaks reached in recent months by the business confidence index. Investments are therefore set to represent the distinctive element of the scenario for this year. I n particular, the extension of the incentives (Super and Hyper-depreciation) provided for by the last Budget Law may continue to support the machinery and equipment component, in a context in which the need to renew production facilities through the introduction of digital and innovative technologies from an "Industry 4.0" perspective into production processes to increase their competitiveness, will go hand in hand with the need to expand production capacity to meet growing demand. For many sectors, the foreign sales component is key for strengthening the growth of activity levels in 2017. The analyses contained in the following chapter show that, despite the pressures stemming from an appreciation of the euro over the year, exports from Veneto showed high growth, demonstrating excellent competitiveness in the international market. This represents an important breaking point with respect to similar phases of exchange rate appreciation faced in the past, as proof of the good competitive capacity of Veneto manufacturing which, after the profound restructuring in recent years, now seems to have "broader shoulders" than the negative effects of a strong euro. In a year like 2018, in which attention to currency aspects is bound to remain high, these considerations confirm the important positive contribution of the export flows to the expansion of activity levels. Industry in the strict sense, i.e., the manufacturing sector net of construction, produced a value added of over 34 billion euros in 2017, a value similar to that of

Tab.1.4.1 - Quadro macroeconomico (variazioni percentuali su valori concatenati con anno di riferimento 2010). Veneto e Italia - Anni 2015:2018

	2015		2016		2017		2018		
	Italy	Veneto	Italy	Veneto	Italy	Veneto	Italy	DEF forecasts Italy	Veneto
Gross Domestic Product	1.0	1.4	0.9	0.9	1.5	1.6	1.4	1.5	1.7
Household final consumption expenditure (a)	1.9	2.6	1.4	1.8	1.3	1.5	1.3	1.4	1.5
Final consumption expenditure of GG and SPIs	-0.5	1.0	1.5	0.1	0.9	0.3	0.3	-	0.4
GFCF	2.1	4.0	3.2	3.3	3.7	3.9	3.8	4.1	3.9
Imports (b)	3.8	6.9	-1.3	-1.2	9.0	8.4	5.0	-	5.2
Exports (b)	3.4	5.3	1.2	1.3	7.4	5.1	4.3	-	5.0

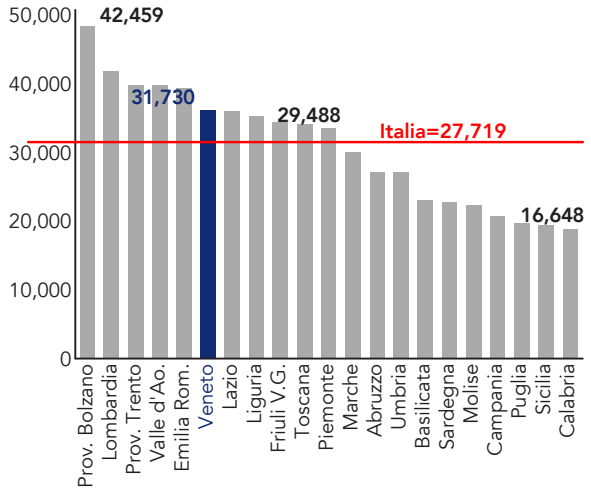
(b) Current values
Source: Processing of data from ISTAT and estimates and forecasts, in red, from Prometeia and Ministry of Economy and Finance - Economic and Financial Document 2018 by the Statistics Office of Regione Veneto

Fig. 1.4.1 - 2017/16 % variation in value added by sector of economic activity. Veneto and Italy



Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

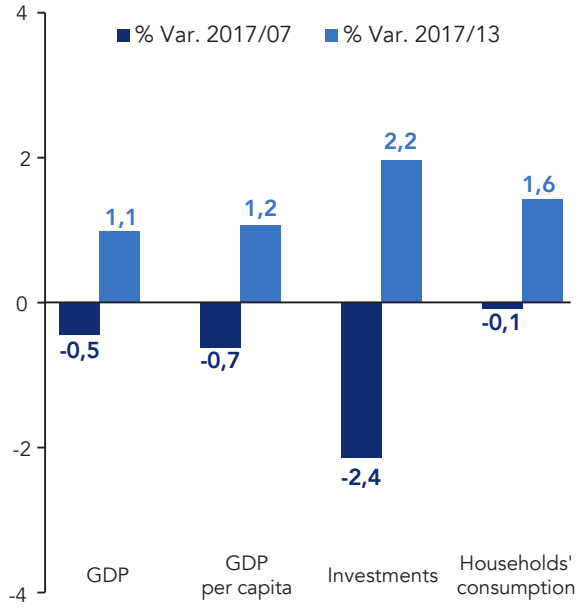
Fig. 1.4.2 - Gross Domestic Product per capita of Italian regions (current euro) - Year 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

mid-2000; the recovery of mid-2000 was abruptly interrupted by international events that led to the worst results being recorded in 2009 (-15% in

Fig. 1.4.3 -Average annual % variations for 2017/07 and 2017/13 of some economic variables. Veneto



Source: Processing of data and forecasts from Prometeia by the Statistics Office of Regione Veneto

one year) and since then has been progressing, although with difficulty in 2012 and 2014, with an average annual increase of 0.2% in the 2011-2017 period. By the end of 2018 an increase of + 3.1% is expected as compared to 2017.

However, it is the service sector that produces the greatest share in terms of wealth: the value added created by services in 2017 was over 90 billion euros in real terms, 68% of total value added, and its progressive growth over the years came to a halt in 2008, the initial year of the crisis; in 2009 difficulties persisted and from those years there has been a fluctuating trend that has not fully recovered. In fact, against an average annual increase7 of 2.8% in the 1980s and 2% in the 1990s, the average annual value added trend was just over zero in the 2000s (+0.3%) and recovered in the subsequent period from 2011 to 2017 (0.4%). We will have to wait until the end of 2018 to expect a + 1.3% increase.

The construction sector accounts for 4.4% of the total regional value added amounting to almost 6 billion euros. After the boom in the 2000s, which peaked in 2006, the crisis hit small artisan businesses the

hardest, despite the widespread use of incentive tools to encourage restructuring and the recovery of buildings and urban areas. This resulted in a very sharp fall from 2007 to 2012, which then began to decelerate and led to a decrease in value added of 3.7% on average per year from 2011-2017. Since 2017 a recovery has begun that will also continue in the years to come.

Agriculture achieved a value added of around 2.6 billion euros in 2017, equal to about 2% of the entire regional economy; this may seem a residual value, however, it should be noted that Veneto produces 9.3% of the national agricultural value added, placing fourth in the ranking of Italian regions.

Per capita GDP8, which is a measure commonly used to determine the level of wellbeing in an area based on the amount of wealth produced by its economic system, has collapsed in real terms since 2008, both in Veneto and at national level. In 2010-11 it recovered slightly, then fell and in 2014 began to climb once again. In fact, in the period between 2013 and 2017, the average annual increase was equal to 1.2%. Veneto's GDP per capita is currently 3,700 euros higher than the national average and this difference is expected to become more significant over time.

In contrast, disposable income9 is a summary measure

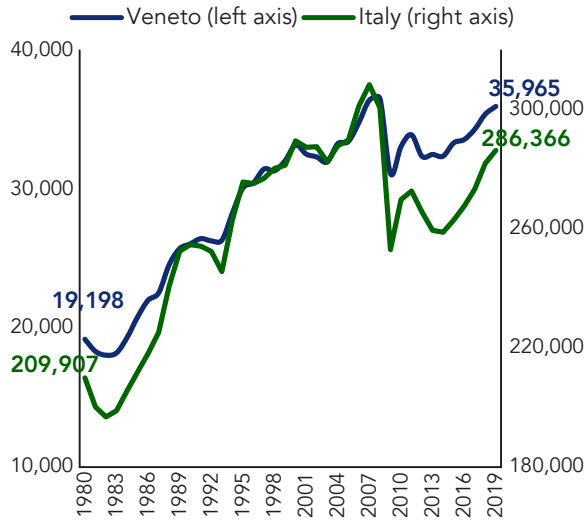
8 Calculated here in 2010 euro, to assess the historical trend stripping it of the inflationary effect.

9 Represents the amount of current resources of operators for final uses (consumption and savings). In fact, it includes all the incoming and outgoing flows pertaining to residents, even if they are obtained outside the region, while excluding resources obtained in the region by persons residing elsewheref the economic well-being enjoyed by residents of an area, considered in their capacity as consumers and savers. The estimated disposable income per capita of Veneto households in 2017 was approximately 19.4 thousand euros, higher than the national average (17.5 thousand euros), and up by 1.6% as compared to the previous year. The forecasts assume that it will increase further in 2018 and 2019.

Household consumption per capita, evidently linked to the level of income, has shown a recovery since 2015, after a timid stabilisation in 2014, and in 2017 the trend continued with increases of 1.7% and 1.6%.

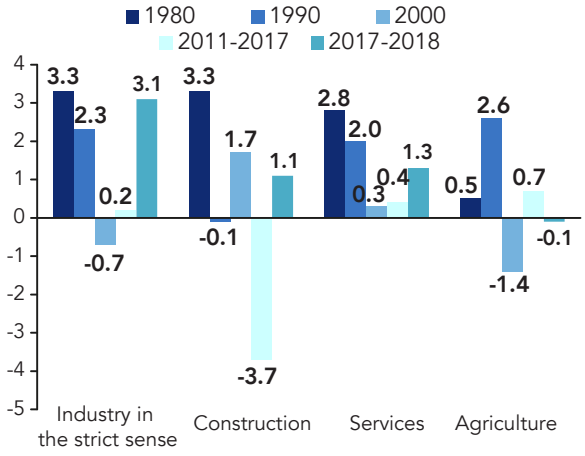
The data on disposable income and consumption for 2017 confirm signs of improvement in the

Fig. 1.4.4 - Value added of industry in the strict sense (milion euros year 2010). Veneto and Italy - Years 1980:2019



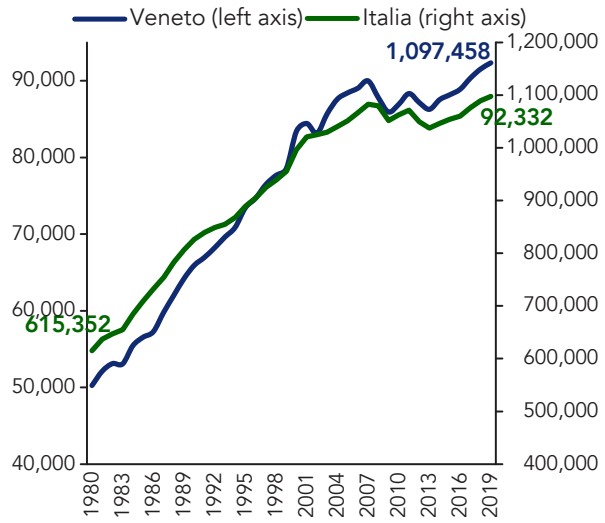
Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

Fig. 1.4.5 - Average annual % variation in value added per sector of economic activity over different periods. Veneto



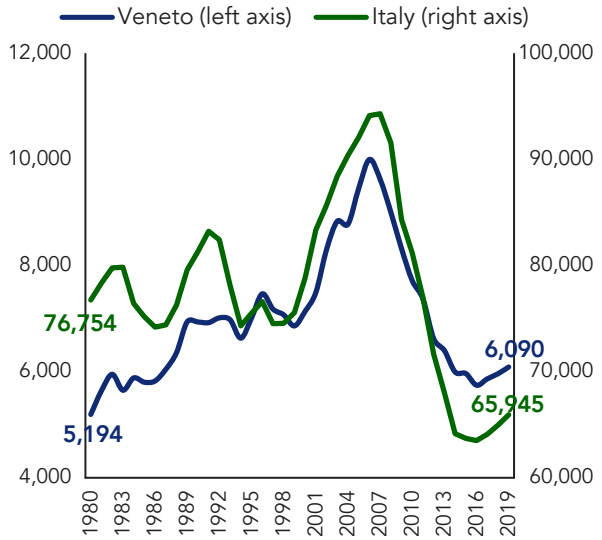
Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

Fig. 1.4.6 - Value added of services (millions euros in 2010). Veneto and Italy – Years 1980:2019



Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

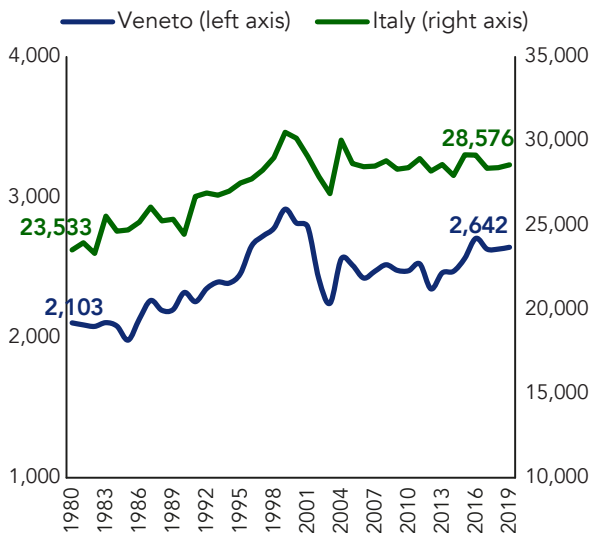
Fig. 1.4.7 - Value added of construction (millions euros year 2010). Veneto and Italy - Years 1980:2019



Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

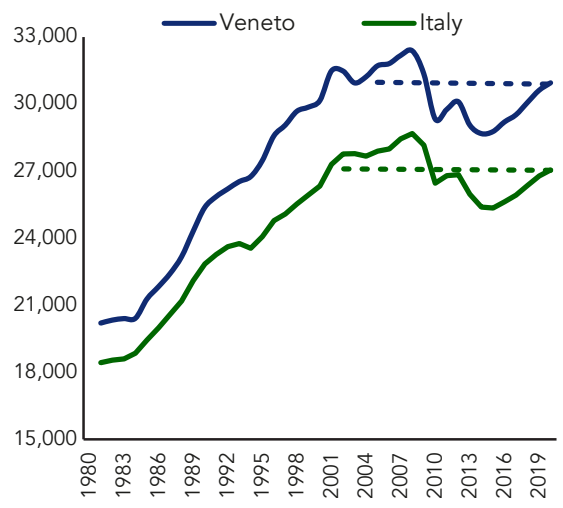
condition of households in Veneto. Household budgets benefited from some favourable factors such as the recovery of the labour market, an inflation which was almost zero, and from an improvement in household purchasing power.
The propensity to save of Veneto households, after having reached a low in 2012, remains at the same level as the last year and approaches the Italian average.
Among the other components that contribute to the formation of GDP, Gross Fixed Capital Formation was analysed, which represents the value of durable goods purchased by resident production units for use in the production process, as well as the value of services incorporated in the capital goods purchased.
Capital per worker10 in 2017 grew by 1.6% in Veneto and are expected to increase over the next two years.
After the severe collapse in 2009, productivity11 recovered, although not reaching the 2007 peak; then it dropped down until reaching its lowest level in 2012, and for some years remained rather stagnant (-0.3% in 2017). A slight increase is expected in the next two years.
Prices in Veneto in the national context In Italy,

Fig. 1.4.8 - Value added of agriculture (million euros year 2010). Veneto and Italy - Years 1980:2019



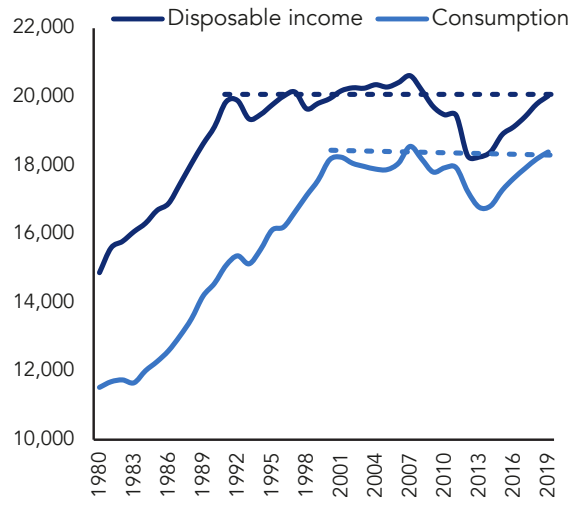
Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

Fig. 1.4.9 - Gross Domestic Product per capita (euro year 2010). Veneto and Italy – Years 1980:2019



Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

Fig. 1.4.10 - Spesa per consumi finali e reddito disponibile delle famiglie (euro anno 2010 pro capite). Veneto - Anni 1980:2019

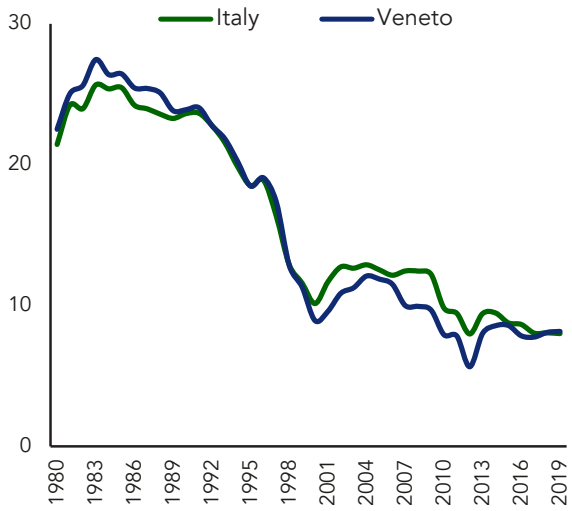


Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

consumer prices rose by an average of 1.2% in 2017. Inflation, which had fallen slightly in 2016 10 Labour Units were used to standardise capital investments. The Annual Labour Unit represents the annual amount of work done by a full-time employee, or the equivalent amount of work done by part-time or dual-employment workers.(-0,1%), but had closed the year with a recovery, accelerated in the first quarter of 2017 (+1,4%),with an upswing in the second quarter (+1,5%) and a gradual slowdown in the third and fourth quarters of the year (+1,1% and +0,9% respectively).

The 1.2% growth of the general index in 2017 is particularly due to the increases in the transport price expenditure, +3.4%, which reverses the trend compared to the previous year when the variation was -1.4%. In addition, significant variations were recorded for food and non-alcoholic beverages, with an increase by +1.9% that is significant compared to +0.2% in 2016; for housing, water, electricity and fuels the variation was +1.8%, with a reversal of the trend compared to -1.7% recorded in 2016; for accommodation and catering services the variation was +1.6%, with an acceleration from +0.7% and, more distantly, for other goods and services the variation was +0.8%.

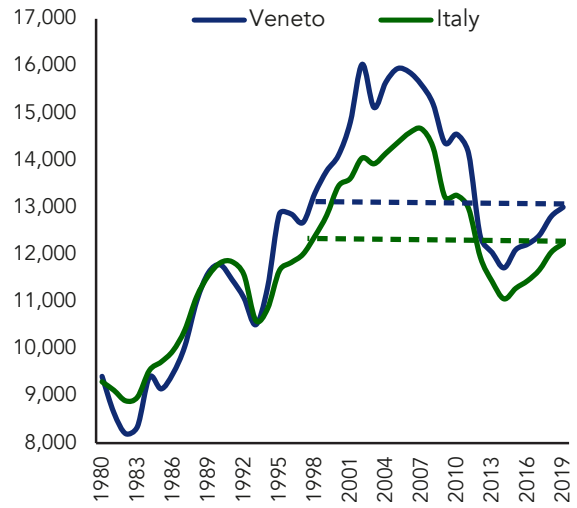
Fig. 1.4.11 - Household propensity to save (*). Veneto and Italy - Years 1980:2019



(*) Shares of savings on households' disposable income
Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

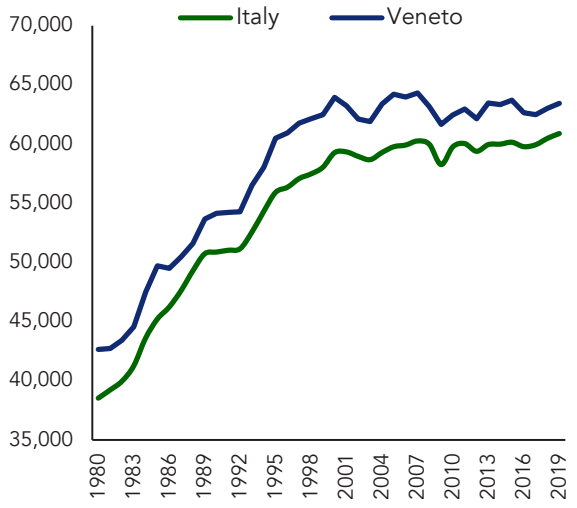
Compared to the previous year, however, the growth slowed down of the prices of alcoholic beverages and tobacco (+0.6% from +1.5%), clothing and footwear (+0.3% from +0.5%), recreation, entertainment and culture (+0.3% from +0.6%) and health services and health spending (+0.2% from +0.4%), while there was no variation in the prices of furniture, articles and services for the home. There are two expenditure divisions whose prices show an average annual decrease: education (-4.7% from +0.7% in 2016) and communications (-2.3%, which accentuates the 0.3% decrease of the previous year).
The average inflation recorded in Veneto in 2017 is the same as the national one: 1.2%.
With reference to the specific expenditure areas, Veneto shows that at national level there has been a strong increase in transport prices (+3.7%). The other areas that were above average are prices for dwelling, water, electricity and fuels (+ 1.7%) and food and soft drinks (+ 1.6%).
A negative variation was recorded in prices for education (-3.7%) and communications (-2.4%).
Almost stable prices were observed for recreation, entertainment and culture (+0.3%), furniture, household articles and services (-0.3%), clothing and footwear
(+0.4%).

Fig. 1.4.12 - Gross Fixed Capital Formation per Labour Unit (euro year 2010). Veneto and Italy - Years 1980:2019



Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

Fig. 1.4.13 - Productivity (euro year 2010). Veneto and Italy - Years 1980:2019



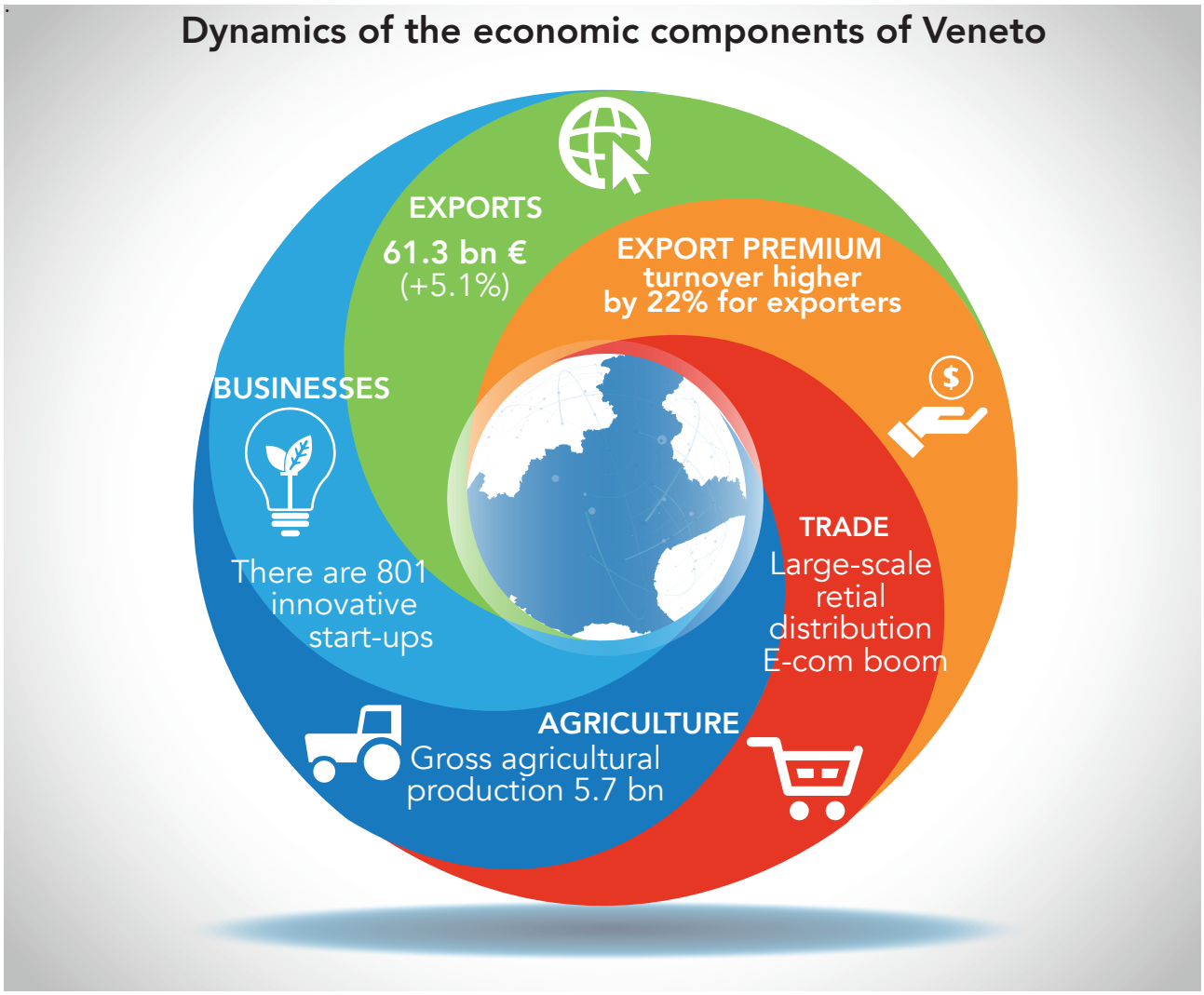
Source: Processing of data from ISTAT and Prometeia forecasts by the Statistics Office of Regione Veneto

THE THEME - SPECIALITIES

CHAP. 2 – ECONOMIC ACTIVITIES AND SPECIALITIES IN DEMAND FROM ABROAD

As of 31 December 2017, there were 434,373 active units in the Veneto production system, representing 8.4% of the national enterprise base. The number of active businesses in Veneto remained more or less the same as the previous year (-0.1%); however, the sectoral analysis highlights the effects of some long-term dynamics that indicate a contraction of the four main traditional economic sectors (agriculture, industry, construction and trade) and the growing opportunities for starting businesses that come from the service sectors. The total value of 2017 gross agricultural production in Veneto is estimated at 5.7 billion euros, substantially stable compared to the previous year (+0.2%). The agricultural year was unfavourable for the herbaceous (-5.7%) and woody (-8.5%) crops, while livestock farming showed a positive variation (+7.7%): the result was favourably conditioned by the trend of prices, which contributed to reduce losses. In 2017, the value of exports from Veneto stood at 61.3 billion euros, an increase of +5.1% compared to 2016. Veneto exports are growing thanks to the traditional European and North American markets: in 2017, over 90% of the contribution to the growth of Veneto exports came from sales on these markets, of which 69% in the EU countries. The data on flows in 2017 also confirms a substantial recovery in exports to Russia (+150 million compared to 2016), which had already begun in 2016 and was driven by the excellent results of the two main sectors of Veneto manufacturing: machinery sales recorded an increase of thirteen percentage points, while those of the fashion sector exceeded 20%.

In 2017, fixed-place shops active in Veneto were 49,605, down 0.6% compared to 2016, perfectly in line with the Italian figure (-0.6%). E-commerce is growing: Veneto is one of the leading regions, together with Lombardy and Lazio, in terms of the number of orders for online products.



I Our analysis shows that the products and services offered by the Veneto business world are "globalised specialities". It looks like an oxymoron, but rather this is the characteristic of the most successful Veneto businesses, winning in the world but anchored to their region of origin, a phenomenon that the sociologist Zygmunt Bauman defined as globalization or glocalism. In Veneto, a large proportion of businesses create or distribute products and services for a global or international market, but they do so based on local know-how and culture, and many local organisational structures that operate based on local cultures and needs have developed with the aim to become multinational or global entities. This chapter describes the characteristics and economic aspects of national and Veneto business activities, foreign demand and the specific features of domestic trade.

2.1 Businesses towards Post-crisis recomposition

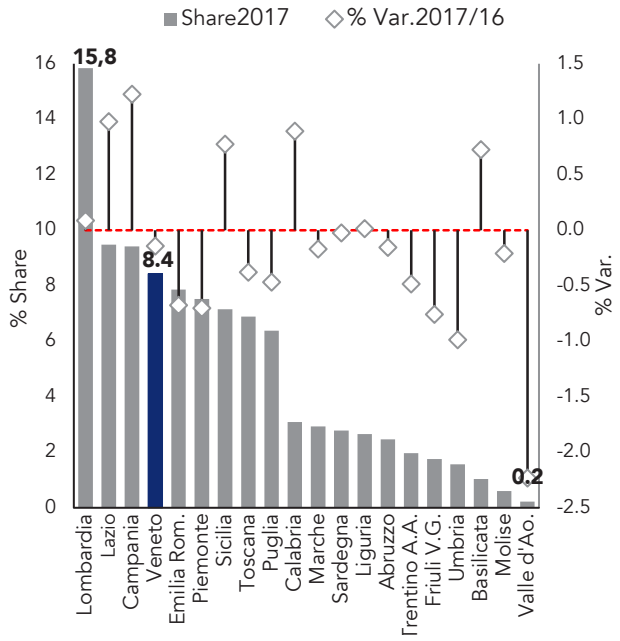
Italy

2017 closed with an almost unchanged result for the Italian business system. As of the end of the year, the balance between the businesses created and those that ceased operations increased by over 15 thousand units, in line with the figures from the two previous years. This positive result is due to the slight decrease in new registrations, which amounted to 356,875 units, and to the simultaneous slowdown in the flow of closures, equal to 341,470 units. As of 31 December, therefore, there were 6,090,481 businesses registered in the businesses Registers at the Chambers of Commerce, of which 5,150,149 were active.

Growth in 2017 was more accentuated in the Centre and South. In absolute terms, the regions that showed the greatest increase in the number of businesses were Campania (+5,868), Lazio (+4,730), Sicily (+2,834), Calabria (+1,408) and, more distant, Lombardy (+710). In turn, the most significant decreases came from Emilia Romagna (-2.756), Piedmont (-2.742), Puglia (-1.545) and Tuscany (-1.346).

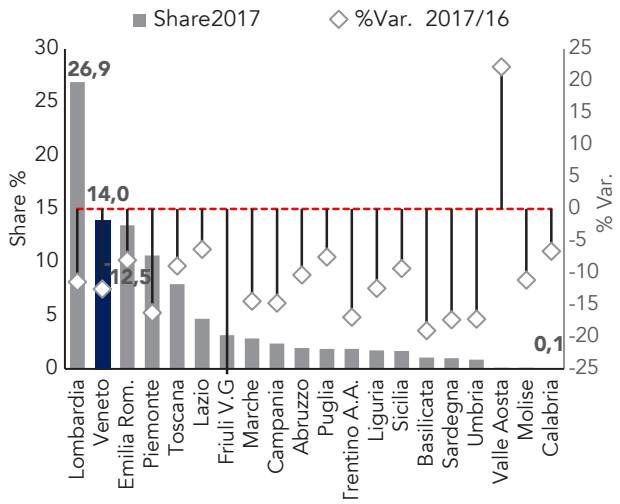
In 2017, the number of businesses that filed for bankruptcy or voluntary liquidation procedures continued to fall, returning to the levels seen before the last economic crisis. In Italy, around 93 thousand businesses have initiated such liquidation procedures, a figure that is down by 5% compared to the figure

Fig. 2.1.1 - Share and annual percentage variation of active businesses by region - Year 2017



Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

Fig. 2.1.2 – Share and annual percentage variation in the number of bankruptcies by region - Year 2017



Source: Processing of Cerved data - Observatory on bankruptcies, procedures and business closures, by Statistics Office of Regione Veneto

of the previous year. The decrease is more marked for bankruptcies (-11.3%) and arrangements with creditors (-29%) and more contained for voluntary liquidations (-4%).

Bankruptcies fall

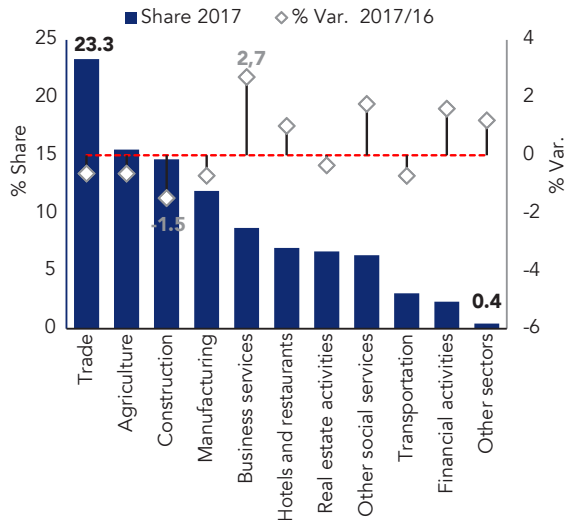
At the sectoral level, the most encouraging dynamics are recorded in industry (9%
19% less than in 2016) and construction (-17%), which still remain at levels far from the pre-crisis ones. In the services and other sectors, 7,973 businesses went bankrupt, down by 7.5% compared to 2016.
As for the geographical area, in the North-west in 2017, 3,504 businesses went bankrupt, 12.4% less than in 2016, while in the North-east there were 2,264 cases, 12.2% less than in 2016. In the Centre, 3,068 businesses went bankrupt, down by 8.9% in comparison to 2016, and in Southern Italy bankruptcy cases fell by 11.5%.
The bankruptcy trend of Veneto businesses is also very encouraging: in 2017, the number of businesses that went bankrupt in Veneto fell by 12.5%. The end-of-year data confirms and strengthens the signs of economic improvement that had already emerged in the previous year (-14%) and that should help the regional entrepreneurial system to exit from this long period of economic crisis.

The post-crisis recomposition of the Veneto entrepreneurial system

Veneto

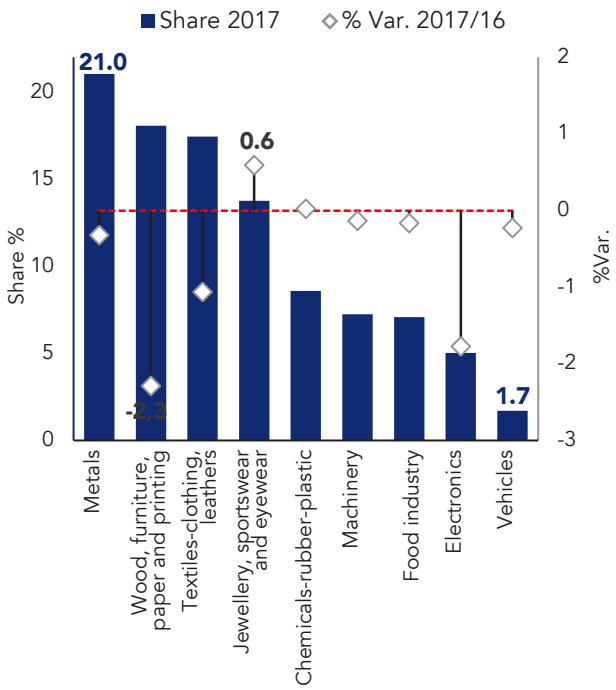
As of 31 December 2017, there were434,373 active units in the Veneto production system, accounting for 8.4% of the national business base. The number of active businesses in Veneto remained roughly the same as the previous year (-0.1%), but the sectoral analysis highlights the effects of some long-term dynamics that mark a contraction of the four main traditional economic sectors (agriculture, industry, construction and trade) and the growing business opportunities that come from the service sectors.
Agriculture continues to record a reduction in the number of businesses (-429 units), linked both to the continuous changes in the use of agricultural land (also used for tourism or residential construction), and to processes of rationalisation and unification of businesses.
The Veneto industry shows an overall negative balance of 367 units (-0.7% per year) due difficulties in some sectors such as the wood and furniture manufacturing sectors (-2.3% per year), the electrical

Fig. 2.1.3 -Share and annual percentage variation of Veneto's active manufacturing businesses by economic category - Year 2017



Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

Fig. 2.1.4 - Share and annual percentage variation of Veneto's active manufacturing businesses by economic category - Year 2017



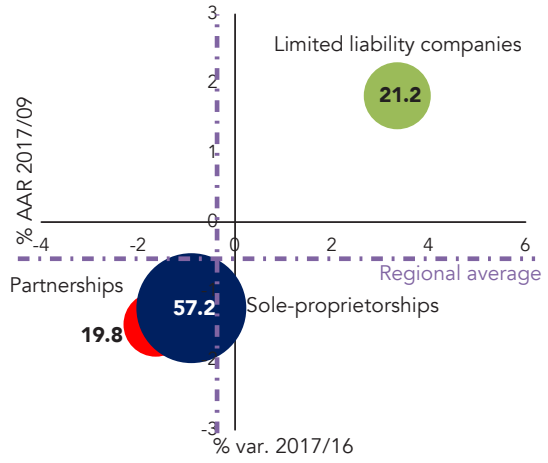
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

and electronic equipment sector (-1.8%), and the fashion sector (-1.1%).
Among the few manufacturing sectors that closed the year with values close to those of the previous year were the mechanical sector (-0.1%) and the food industry (-0.2%).
Construction is the sector with the main contribution to reducing the number of active businesses of Veneto (-1.5% per year). This data shows the evident crisis for the construction sector: between 2010 and 2017, almost 11 thousand Veneto businesses left the sector (-14.6%). In order to achieve the objective of a recovery in the sector, it is fundamental to ensure a revival of investments for the infrastructural development of the region.
Despite the recovery, entrepreneurial trade dynamics remain negative (-0.6% per year). The recession has left its mark especially in the retail trade sector, which continued to decline in 2017. In the last eight years, the economic crisis and the commercial policies of large-scale retail businesses have led to a significant reduction in retail stores in the region, equal to -3.5%.
From the point of view of the dynamics of expansion of the regional entrepreneurial base, the most interesting signs come from the services (+1.2% per year). Business services have the highest sector balance in absolute terms (+999 units compared to 2016). The contribution of the social and personal services sector was also significant, growing by 483 units, equal to an increase of 1.8%. The performance of the tourism sector (catering and accommodation services) was also good, with an annual increase of one percentage point in business stock . In turn, real estate activities (-0.3%) and the logistics sector (-0.7%) recorded negative trends.

The tertiary sector thrives

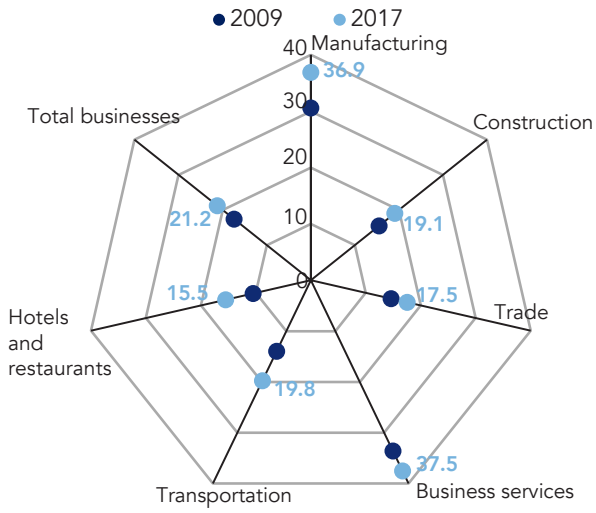
The analysis of the organisational forms of the businesses highlights, in an incontrovertible way, the structural orientation of the entrepreneurial system is to grow thanks to the expansion of more solid business forms than in the past. The only positive increase is in fact due to the share of limited companies, which increased by 2,991 units (+3.4% per year). Sole proprietorships, which continue to represent more than half of the regional business base (57.2%), contributed negatively, with a decline of almost one percentage point. The number of partnerships also fell, falling by 1,434 units (-1.6% per year). The Veneto entrepreneurial system is gradually being reshaped into more complex forms of

Fig. 2.1.5 - Entrepreneurial dynamics by type of legal form. 2017 % share (million euros), % var. 2017/16 and AAR (*) % 2017/09



(*) Average annual rate
Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

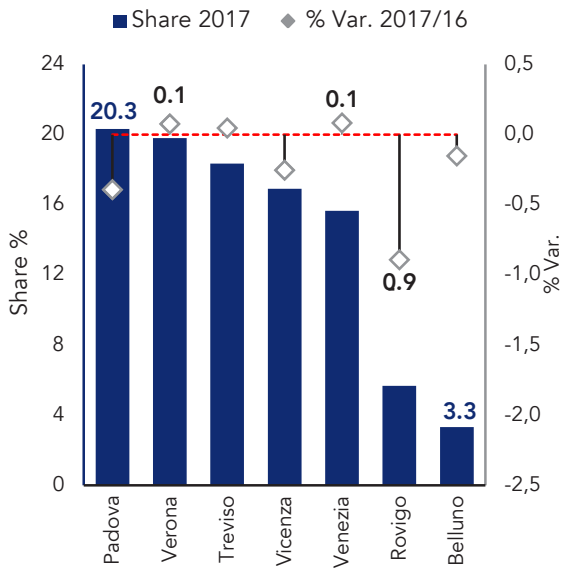
Fig. 2.1.6 - Incidence of limited companies On the total of businesses active in sono economic sectors. Veneto - Years 2009:2017



Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

business suitable for competing in new markets.
In recent years, limited companies are the only legal forms to contribute to the growth of the regional productive fabric; their impact on the total number of active businesses has increased by 3.8 percentage points, rising from 17.4% in 2009 to 21.2% in 2017.
This occurs in all the main economic sectors: in the manufacturing sector, the weight of limited companies on the total active businesses in the sector has grown by more than six percentage points and almost reached 37% in 2017; in business services, the share of limited companies reached 37.5%, and even in sectors characterised a fairly stable entrepreneurial dynamic.
In the last twelve months, the provinces that have registered slightly negative business trends are Rovigo, Padua, Vicenza and Belluno, while in the remaining provinces growth was close to zero. Padua confirms its strong entrepreneurial vocation, maintaining leadership in the number of active businesses in the region.

Fig. 2.1.7 - Share and annual percentage variation of active Veneto businesses by province - Year 2017



Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

Female and youth entrepreneurship

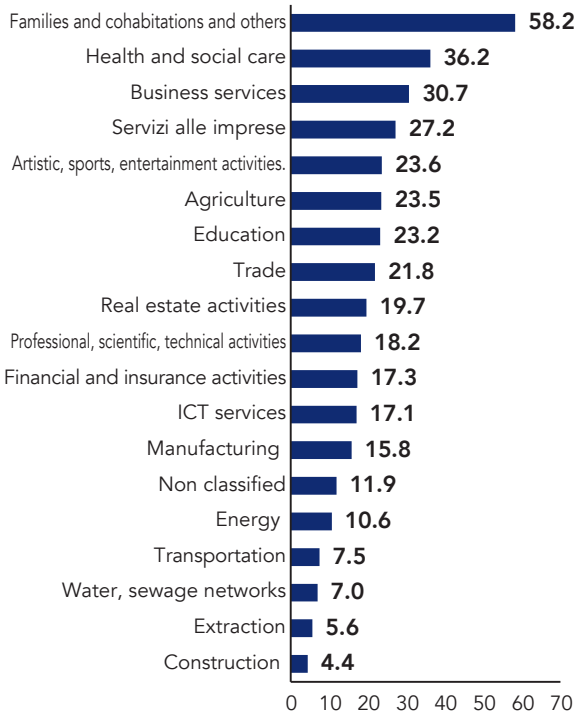
As of 31 December 2017, there were 88,161 active female-run[1] businesses in Veneto, equal to 20.3% of the total regional businesses, with a slight increase (+462 units, equal to 0.5%) compared to at the end of 2016.
This female-run businesses is attributable to limited companies, which grew significantly compared to the previous year (+658 units, equal to 4.6%). Partnerships, on the other hand, declined significantly (-2.2%).
A characteristic of female entrepreneurship is the large number of sole proprietorship businesses. The data for 2017 also confirms the prevalence of sole proprietorships, with more than 60 thousand active units, equal to 68.2% of the total number of businesses in the group, and the use of this legal form is in any case stable over the last year (+0.1%).

Female entrepreneurship is also becoming more structured

If the highest rates of feminisation[2] are still found in sectors that are traditionally characterised by the presence of women (family services, health and social assistance, housing and catering), there is a remarkable trend on the part of female entrepreneurs to penetrate also sectors that traditionally appear to be reserved for men. In fact, female-run businesses grew in the logistics sector (+2%), against a 1% decline in male-run businesses, and in the financial sector (+3.2%). by the strong presence of sole proprietorship businesses, like construction and transport, there is a significant increase in the number of limited companies, which account for almost 20% of the total number of active businesses in these sectors. At a regional level, all the Veneto provinces have had

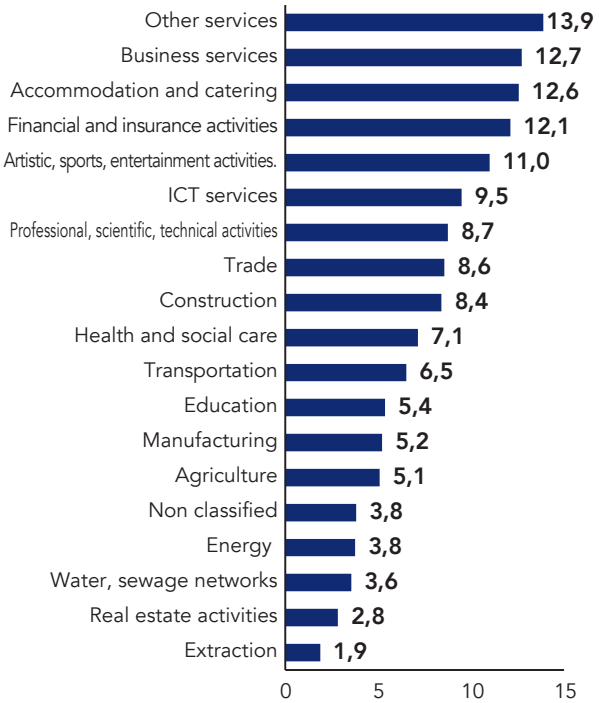
1 "Female-run businesses" are businesses in which women hold the majority share. The degree of gender participation shall be determined by the legal status of the business, by the proportion of capital stock held by each female member, if any, and by the proportion of women among the business directors, owners or members. In general, businesses are considered to be female-run if the overall participation of women is more than 50% by mediating the composition of participation shares and administrative positions held by women.
2 Given by the percentage ratio of female-run businesses to the total number of businesses in the sector.

Fig. 2.1.8 – Feminisation rates by sector of economic activity (*). Veneto Year 2017



(*) Feminisation rate: the percentage ratio of female-run businesses to total businesses in the sector
Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

Fig. 2.1.9 – Percentage of youth businesses by sector of economic activity (*). Veneto - Year 2017



(*) Incidence: the percentage ratio of youth businesses to the total number of businesses in the sector.
Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto

Other sectors are also showing positive signs: + 5% in professional and scientific activities; + 3.4% in business services; + 4.3% in health and social services and + 3% in artistic and entertainment activities. The dynamics of female-run businesses in the trade sector, which remains the main sector of female entrepreneurship, were almost in line with those of the previous twelve months almost similar to the previous year.

Among the main economic sectors, trade accounts for the highest number of young entrepreneurs, with 8,670 businesses (equal to 8.6% of the total businesses in the sector), even though a considerable annual decrease of -5.1% was registered; a decrease is also recorded in the youth construction businesses[3] (-11.4%), which account for 5,353 units (second sector in terms of the majority of shares in the control and ownership of the business are held by persons under 35 years of age. The degree of participation shall be determined by the legal status of the business, by the proportion of capital stock held by each member and by the proportion of young people among the business directors, owners or members.youth entrepreneurial base3 (-1,456 employees, -4.1%)

The difficulties of businesses run bu under-35s

In general, businesses are considered to be youth-run if the overall participation
of young people is more than 50% by mediating

3 "Youth businesses" are businesses in which

the composition of participation shares and administrative positions held by young people number and incidence on the total number of businesses in the sector of 8.4%), in the tourism sector (-2.8%), third sector of youth entrepreneurship, with 3,816 employees and an incidence of 12.6%, and in manufacturing (-6.0%). However, the dynamics of agricultural businesses was the opposite: +3.8%, with 3,413 businesses accounting for 5.1% of the total.
With regard to the legal form of youth businesses, there is a clear predominance of sole proprietorships (more than 26 thousand units, equal to 76.2% of the total of youth businesses), with a decrease of -4.9%, followed by limited companies (6,376 units, 14.8%), up by +3.7%, and partnerships (2,692 units, equal to 7.9%), down by nine percentage points. Sole proprietorships are also those with the highest percentage incidence on the total number of active businesses (10.5%).

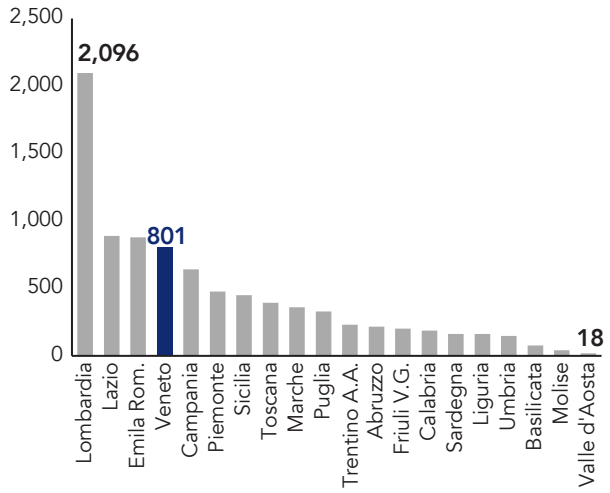
Innovative start-ups

The smart factory will be one of the key elements of the development of future manufacturing. The new industrial revolution will mainly focus manufacturing processes. Businesses will increasingly need to focus on innovation in order to be more competitive and to enter the most dynamic foreign markets. Innovative start-ups are one of the tools for gaining privileged access to innovations and digital skills that businesses, for cost or time reasons, are unable to create in-house. In fact, the number of Italian innovative start-ups, even in a context that is still characterised by scarce investments, continues to grow: in March of this year, 8,744 innovative start-ups were registered, about two thousand more businesses than at the beginning of 2017.
At the regional level, Lombardy is still the region with the highest amount of innovative start-ups: there are 2,096 businesses in Lombardy, equal to 24% of the national total.
Lazio ranks second, with 887 businesses (10.1%), closely followed by Emilia Romagna with 877 innovative start-ups (10%) and Veneto (801).
The positive trend on the transformation of industrial and in 2018, with an annual growth of close to forty percentage points. As far as the economic sectors are concerned, the strong concentration of start-ups in the production of services is confirmed (65% of regional start-ups), in particular in the creation of software and in computer consultancy, in which almost 30% of Veneto start-ups are involved. A good 30%, however, is active in the industrial sector, with a strong presence in the mechatronics sector.

The number of Innovative start-ups is growing in Veneto

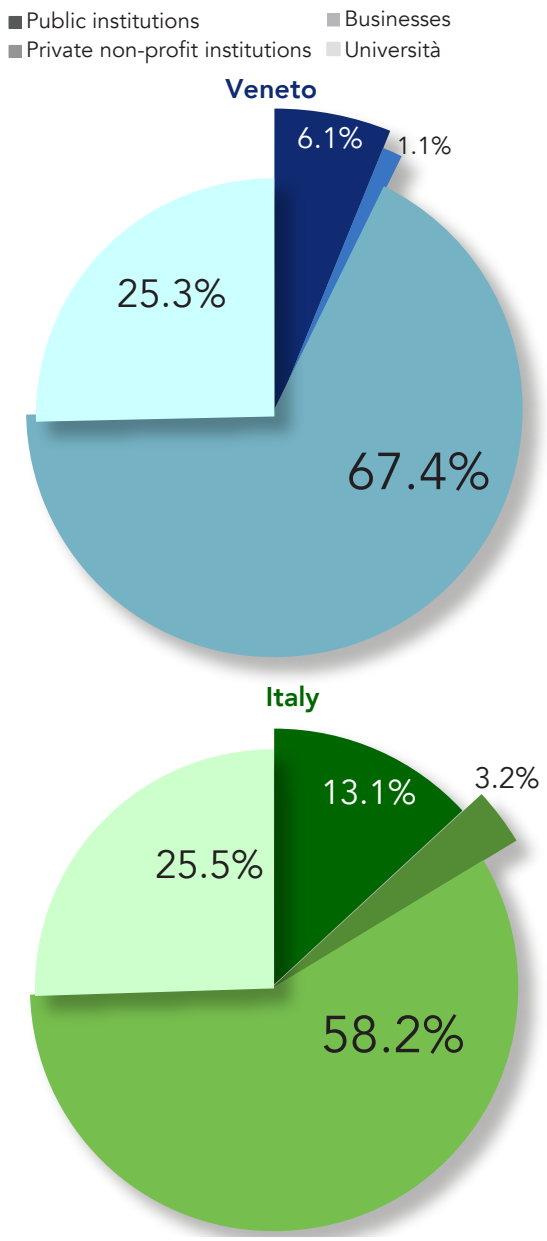
Padua is the most dynamic Veneto province with its 220 resident innovative start-ups, a figure that puts the province of Padua in sixth place for the number of start-ups at the national level. Among the Veneto provinces, Treviso (with 144 innovative start-ups) and Verona (142) also stand out nationally, as do Venice (108) and Vicenza (95).
Often a business investing in innovation projects tends to organise itself internally with a specific R&D structure. Analysis of the latest available data from the ISTAT survey, which annually gathers information on the research and development activities of Italian businesses and public institutions for 2015, shows a growth in regional private investment of more than five percentage points. Research and development expenditure + 3.4% for universities).
In 2015, the absolute value of R&D expenditure carried out in Veneto by all sectors amounted to 1.6

Fig. 2.1.10 – Number of innovative start-ups by region (*) - Year 2018



(*) I dati fanno riferimento al 12 marzo 2018
Fonte: Elaborazione dell'Ufficio di statistica della Regione del Veneto su dati Registro Imprese

Fig. 2.1.11 – Percentage distribution of intra-muros R&D expenditure by institutional sector. Veneto and Italy - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

billion euros, equal to 7.6% of national expenditure. The percentage ratio of R&D expenditure to regional Gross Domestic Product is 1.1% and is stable compared to the previous year.

Artisan businesses

The artisan businesses represent one of the pillars of the Veneto economy and constitute an element of recognition of our region in the world. Globalisation and the Knowledge Economy have caused difficulties for the system of artisan businesses, forcing a strong reorganisation of the artisan productive fabric, both from a quantitative and qualitative point of view.

In 2017 the selection of artisan businesses persisted: as of 31 December 2017 there were of the private component exceeds one billion euros and represents more than 2/3 of total regional expenditure. Compared to 2014, the R&D expenditure of the public component also increased (+1.5% for the General Government and 128,504 active artisan businesses in Veneto, down by one percentage point compared to 2016, and they represented 29.6% of the total number of businesses operating

Tab. 2.1.1 – Artisan businesses: number, share and annual percentage variation by economic category. Veneto - Year 2017

	Numer	Share	% Var. 2017/16
Costruction	48,821	38.0	-1.8
Manufacturing	33,417	26.0	-1.8
Other social and personal services	16,310	12.7	0.8
Transportation	8,574	6.7	-2.3
Trade	6,741	5.2	-0.6
Business services	4,212	3.3	4.6
Accommodation	4,161	3.2	-0.1
and catering	2,303	1.8	1.1
Professional and scientific activities	1,415	1.1	0.8
Agriculture	2,550	2.0	1.9
Other	**128,504**	**100.0**	**-1.0**

Source: Processing of data from InfoCamere by the Statistics Office of Regione Veneto Fonte: Elaborazione dell'Ufficio di statistica della Regione del Veneto su dati InfoCamere

in the region. Artisan businesses in the construction sector represent 38% of the regional artisan entrepreneurial sphere; 26% operate in the manufacturing sector, 12.7% in other service activities, 6.7% in logistics and 5.2% in trade.
The sectors with the most positive dynamics, among those with a significant incidence, are: "other services", which grew by +0.8% on an annual basis, "rentals, travel agencies, business support services" (+4.6%, incidence of 3.3%) and "professional, scientific and technical activities" (+1.1%, incidence of 1.8%). Among the most important sectors, there was a negative trend in transport and storage (-2.3%), construction (-1.8%) and manufacturing (-1.8%).
In all the provinces there was a reduction in the artisan entrepreneurial base, between
-0.4% in Venice and -1.9% in Rovigo. Padua is the Veneto province with the greatest number of artisan businesses (20%), followed by Verona (19.6%) and Vicenza (18.8%). In 2017, 5.7 new businesses out of 100 were active and 6.8 out of 100 closed. As a result, the entrepreneurial balance of artisan businesses was negative at -1.1%.

2.2 The situation of Veneto agriculture[4]

The total value of gross agricultural production in Veneto in 2017 is estimated at 5.7 billion euros, substantially stable compared to the previous year (+0.2%). The agricultural year was unfavourable for the herbaceous (-5.7%) and woody (-8.5%) crops, while livestock farming showed a positive variation (+7.7%): the result was favourably conditioned by the trend of prices, which contributed to reduce losses.
In line with the national trend, the number of agricultural farms registered with the Veneto Chambers of Commerce fell by 0.7% to 63,637 during 2017. This decrease exclusively concerned sole proprietorship businesses (down to 52,403 units), down by 1.5% but still accounting for 82.3% of the total number of agricultural businesses in Veneto.
In turn, partnerships grew, up by 3% compared to 2016 (9,690 units) and limited companies (1,047 businesses, +5.5%). The largest number of agricultural businesses is located in the provinces of Verona (15,472 units), Treviso (14,123) and Padua (12,154), which together account for 65.6% of agricultural businesses in Veneto. The number of businesses in the Veneto food sector also fell slightly in 2017 (around -0.2%), in line with the Italian food industries trend, which recorded a decrease of -0.5%; this decrease concerns all business forms, in particular partnerships (1,250 businesses, -4.6%) and sole proprietorships (1,243, -3.1%), with the exception of limited companies, the number of which rises to 1,084 units (+5.2%). During 2017, according to ISTAT data on workforce, there was a decrease in agricultural employment at regional level (-5.7%), compared to 2016, which on average had 68,450 units. In detail, there was an increase in the number of self-employed people (about 46,000 units, +14.2%), while there was a considerable decrease in the number of employed people (just over 22,400, -30.6%). The agricultural sector trend conflicts with the general employment data, which in Veneto also records an increase on an annual basis of +2.1%.
With regard to foreign trade, the Veneto trade balance deficit has more than doubled compared to 2016: the negative balance has increased to about 483 million euros (in 2016 it was about 215 million euros), due to an increase in imports (about 7.1 billion, +8.5%), more than proportional to that of exports, up to 6.6 billion euros (+4.6%).
As far as cereals and industrial crops are concerned, winter and spring weather conditions have had a positive impact on the production of wheat, which has seen an increase in yields (+14% for soft crops and +18% for hard crops), despite the substantial drop in dedicated areas (-8% for soft wheat and -20% for durum wheat). Yields also increased for barley (+8%) and rice (+5%).
Maize suffered from heat waves and droughts that damaged its vegetative development, bringing yields (-14%) to one of the lowest levels in the last decade. The simultaneous decline in surface area led to a drop in production to 1.5 million tonnes (- 16.5%). The same problem applies to soya which, despite an increase in surface area of 15%, a decrease of 23% in yields has brought its production to 404 thousand tonnes (-11%).
Production increased for sugar beet (+9%), which showed high yields per hectare (+12%) thanks to the favourable climate, and also for tobacco (+13%). The strong production recovery of bio-energy crops continues: +21% for sunflowers and +49% for rape thanks to the area invested doubling.
Many horticultural crops were affected by the un-

4 Edited by Veneto Agricoltura, the Veneto Agency for innovation in the primary sector

favourable weather over the summer and recorded negative yields with a reduction in production for lettuce (-16%), strawberries (-4%), carrots (-12.5) and above all leguminous crops such as green beans (-22.3%) and peas (-10.5%); a less significant reduction was recorded for radicchio (124 thousand tonnes, -1.5% compared to 2016), while a production increase was recorded for potatoes (129.500 t, +1.2%), asparagus (+5.4%),
courgettes (+11.4%), melons (+2.8%), garlic (+19.4%) and onions (+12.3%). Horticultural areas increased to about 27,600 hectares, an increase of 1% compared to the previous year. It is estimated that open air vegetables, which represent 75% of vegetables grown in Veneto, amount to about 20,500 hectares (+2%). There was an increase in tuber crops (3,100 ha, +5%), while greenhouse horticultural crops decreased, estimated at about 4,000 hectares (-6%).
Late frosts and droughts had negative repercussions for fruit, except for cherries, showing drops in yield and production, ranging from -4% for pears (74,700 t), to -8.3% for peaches and nectarines (52,100 t), to -23.5% for apples (234,500 t) and even -41.5% for kiwi fruit (41,100 t), partly due to the exacerbation of well-known plant diseases.
Only the cherry harvest increased (+23%), although below the crop's normal production standards. In this case, the -19% drop in price and the lack of economic perspective have caused many farmers not to harvest a large part of their production.
The fall in production was partly offset by price increases of 15% and 24% for apples and kiwis, respectively, while the price of pears and peaches fell by around 1.5%. The bizarre climate has created many problems for the Veneto wine industry with periods of winter drought, strong spring frosts and hot, dry summers, which fortunately have not significantly affected the yields and, above all, the quality of the final product. Last year's grape production was 11 million quintals, with a yield loss of -15,5%. Vinification of the grapes produced about 8.5 million hectolitres, down by 16.5% in comparison to 2016. Vineyard surface area in 2017 was 84,704 hectares, of which 80,256 were already in production, with an annual increase of 10% net. The average price of Veneto grapes increased by +22.6% in the last year, a rise largely credited to the provinces of Treviso and Padua. The Veneto wine export boom continues, with provisional figures reaching 2.13 billion euros and a further +6.4% per year.
As far as the livestock sector is concerned, the quantity of milk produced was around 1.18 million tonnes on an annual basis, with an increase in production of around +2.9% compared to 2016, the price has also reversed the trend with an increase, again on an annual basis, of 11%. Modest signs of recovery in domestic consumption at national level (+0.7% in terms of quantity and +1.5% in terms of value) are confirmed in Veneto by a +3.8% increase in cattle slaughtering and around a +3% increase in prices. For pigs, compared to the national production decrease of close to -4%, the Veneto figure shows a decrease of 1.3%, offset by an increase in price of about +15%. The market is marked by a sharp contraction in imports from the Chinese market (-30%), only partially offset by a slight recovery in domestic consumption, and exports to other countries. In 2017, poultry production fell by 4% in carcass weight compared to the previous year, especially turkey production (-7%), which was accompanied by a substantially higher market price (+9.2%), but not enough to ensure the businesses' profitability.
The local production of sea fishing landed in the six regional fish markets, equal to about 198,223 tonnes, showing a decrease of -4.6% compared to 2016, while the turnover records a loss of -8.6% reaching 50.1 million euros. Considering the overall transits of Veneto markets, therefore including products of local, national and foreign origin present in Chioggia and Venice, the quantities recorded in 2017 amounted to approximately 28,460 tonnes (-4.0%), while turnover was 113.7 million euros (-4.8%). The sector of bivalve sea molluscs managed by the Co.Ge.Vo. Consortium showed a positive trend, with an annual increase of +14.1% associated with the 5,551 tonnes produced in 2017. The Veneto maritime fleet numbers have remained stable (+0.6%) while, in line with the past, fishing businesses have grown by a net +3% compared to 2016; those engaged in aquaculture have remained unchanged (+0.1%).

2.3 Foreign trade is still growing

2017 represented a turning-point between a period of stagnating global demand and a new phase of growth. Global demand growth in 2017 was particularly buoyant and interrupted a long atypical period between 2012 and 2016, when demand for goods grew at rates below those of the global wealth produced. This is due to the recovery of industrial activity; the production of goods is growing at a dynamic rate both in advanced economies and

in emerging countries. In addition, recovery of demand from China, whose impact on world trade has also become significant on the import side, was decisive.
According to OECD 2018 estimates, the leap in global investment should maintain the growth rate of global trade at around five percentage points. However, the positive outlook remains vulnerable and risky, starting with the risks of trade protectionism. The fear, after the customs duties imposed by Donald Trump on US steel and aluminium imports, is that a trade war could slow down world trade growth.

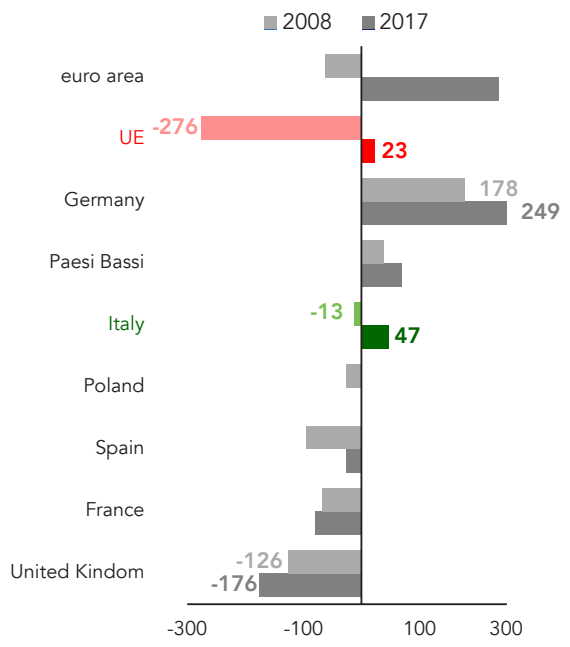
Italy

and 10.3% of national exports, respectively. Export trends to North America were also positive, particularly to the United States (+9.8%), the third largest trading partner for Italian businesses, with a share of 9%. Trade flows back to Brazil (+18.9%) and Russia (+19.3%) are increasing, even if the absolute values are still far from the records achieved between 2012 and 2013. Exports to the former Middle Empire are also good, recording an increase of more than twenty percentage points and crossing the 13 billion euro threshold for the first time. Conversely, trade values with some Middle Eastern markets (-1.4% in the United Arab Emirates and -5.8% in Saudi Arabia) and North Africa were negative.
As far as the economic categories are concerned, all sectors show an increase in foreign turnover during the year, with a more noticeable increase in the sales of chemical products and minerals (+12.4%), which exceed 94 billion euros, together with the sectors of excellence of Italian industry and craftsmanship, such as food. 2017 was a brilliant year for Italian exports:
provisional surveys on sales abroad, published by ISTAT in March, record a significant increase, equal to +7.4% compared to 2016, which brought the value of turnover achieved abroad to 448.1 billion euros.

Robust growth in domestic exports

A look at the geography of Italian exports highlights the strong influence that distance has on trade flows: over 66% of the foreign turnover from Italian businesses is generated in the markets on the European continent, while the share in East and Central Asia, which also show the greatest potential for growth, is around ten percentage points, despite the significant growth recorded in recent years. As for the individual markets, Germany (+6%) and France (+4.9%) remain the main markets for Made in Italy products, absorbing 12.5% (+ 6.8%), mechanics (+ 5.4%), the processing of precious stones and gold (+ 12%) and the fashion sector (+ 4.6%). After four years of negative trends, foreign sales of metalworks also returned to growth (+8.7%).
In 2017, the Italian trade balance surplus was slightly reduced in light of a more substantial increase in supplies compared to foreign sales and confirms itself as the third trade surplus in the EU, only behind the German surplus (+249 billion euros) and the Dutch surplus (+70 billion euros). In fact, 2017 closed with a positive balance of 47.5 billion euros (+81 billion net of energy), compared to 49.6 billion euros recorded in 2016.
Among the sectors that contribute the most to the trade surplus are mechanics, fashion and chemical production, while there is a trade deficit in the

Fig. 2.3.1 - Trade balance. Values expressed in billion euros. Italy, EU, Euro zone and some European countries - Years 2017 and 2008



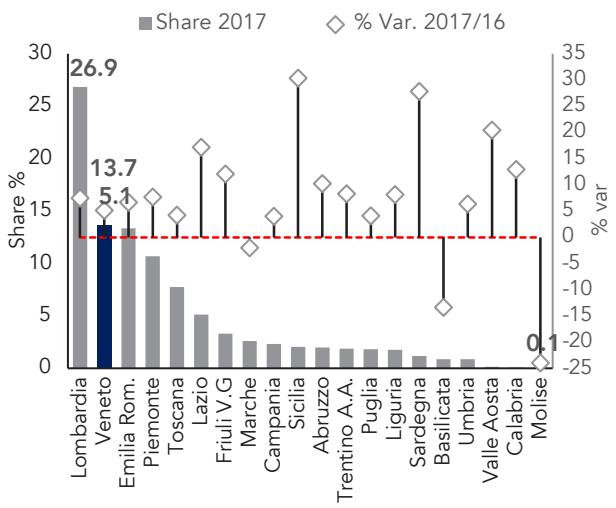
Source: Processing of data from Eurostat by the Statistics Office of Regione Veneto

energy, electronic equipment and agri-food sectors, down from the figure recorded in 2016.
2017 figures confirm the robust annual growth of foreign acquisitions (+9%) and the value of goods imports reached 400.7 billion euros. Compared to the main supply markets, there was growth in imports from Germany (+5.3 billion euros compared to 2016), which remains the main reference market, France (+2.4 billion euros), the Netherlands (+2.3 billion euros) and Russia (+1.7 billion euros). China remains the main market for non-EU acquisitions: the value of acquisitions in 2017 was 28 billion euro (+4% on an annual basis).
In addition, the value of imports from certain raw material producers, such as Iran, Azerbaijan, Russia and Libya, increased sharply during the year. Among the manufacturing sectors that contributed the most to the increase in imports were metallurgical products (+16.4%), electrical equipment (+7.9%), means of transportation (+7.6%) and chemical substances and products (+7.4%).
In terms of the contribution to export growth of the various areas of Veneto, in 2017 foreign sales increased significantly for the islands area (+29.4%, thanks to sales of refined oil products) and were significantly sustained for the north-western (+7.6%), central (+7.0%) and north-eastern (+6.6%) areas. Among the regions that make the greatest contribution to the growth of Italian exports, it is worth mentioning: Lombardy (+ 7.5%), Emilia Romagna (+ 6.7%), Piedmont (+ 7.7%) and Lazio (+ 17.2%). On the other hand, there were negative signals for Basilicata (-13.3%), Marche (-2.0%) and Molise (-23.9%).

Veneto

stood at 61.3 billion euros, with an increase of +5.1% compared to 2016. This figure confirms a greater dynamism compared to 2016, the year in which Veneto exports managed to grow, albeit at a slower pace than the previous year, even in a context of reduced world trade.
The analysis of the individual quarterly performance shows that the increase in the value of foreign sales is the result of a positive trend recorded in all four quarters. The strong growth of the first quarter of 2017 (+6.7%) was followed by the positive variation recorded in the second quarter of April-June (+5.2%). Growth in the third quarter was also good, albeit less intense than in the first two quarters (+3.6%). In the fourth quarter (October-December), there was a further rise in the trend growth rate (+5.2%).

Fig. 2.3.2 - Share and annual percentage variation in exports by region - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

By analysing the destination of Veneto foreign sales, it can be seen that the main reference area also in 2017 was the EU, to which 59.7% of exports from Veneto were directed, against 40.3% destined to non-EU markets. In fact, Veneto exports are growing thanks to the traditional European and North American markets: in 2017, more than 90% of the contribution to the growth of Veneto exports comes from sales in these markets, of which 69% in EU countries.

Foreign sales continue to drive the regional economy

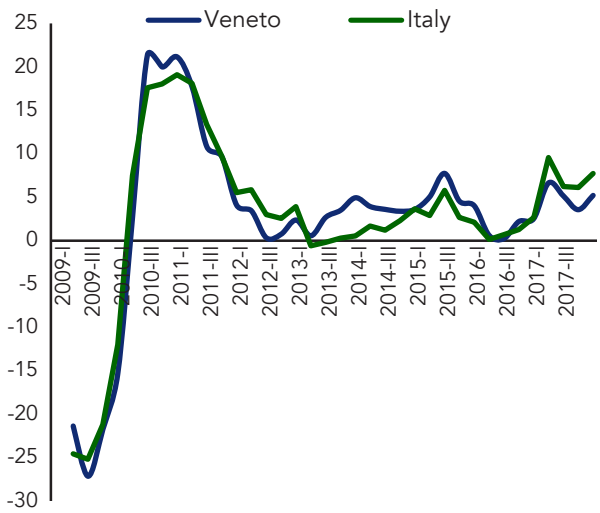
The positive trend also affected the markets of Central Asia (+5.7%) and Eastern Asia (+3.8%), while the value of Veneto product sales to the Middle East continued to fall (-1.7%).
In terms of individual markets, the good result was mainly due to the excellent trend recorded by Veneto exports to France (+5.7%, equal to 324 million euros), the second reference market for businesses in Veneto.
Significant growth was also recorded by exports to Germany (+3.1%), which remains the Veneto's main trading partner by far.

Sales on the Polish market increased by +15.8%, thanks to substantial purchases of electrical equipment and machinery Made in Veneto, while sales to Spain grew by just under eight percentage points.
The 2017 data on flows also confirms a substantial recovery for exports to Russia (+150 million euros compared to 2016), which had already begun in 2016 and was driven by the excellent results of the two main sectors of Veneto manufacturing: machinery sales increased by thirteen percentage points, while those of the fashion sector exceeded 20%.

Exploit of sales to "traditional" markets

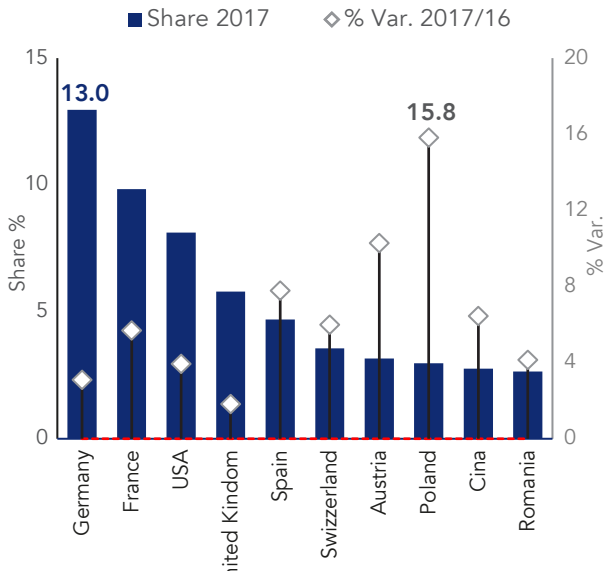
As for the other main non-EU markets, the latest figures published by the ISTAT (the Italian National Institute of Statistics) confirm the further favourable export trend from Veneto to China and the United States. These are two very interesting markets not only for industrial exports, but also for agri-food products and luxury goods. Sales in the USA from Veneto increased by + 3.9%, thanks above all to the goldsmith sector contribution (+15%), metallurgical production (+16.5%) and agri-food production (+7.1%). The performance towards China was also excellent: +6.4% on an annual basis, with peaks in the sales of eyewear (+13.9%), furnishings (+30.1%) and metalworking (+32.3%).The performance towards China was also excellent: +6.4% on an annual basis, with peaks in the sales of eyewear (+13.9%), furnishings (+30.1%) and metalworking (+32.3%).
Instrumental mechanics (Veneto's leading export sector, with over 12 billion euros in 2017) has managed to maintain a competitive advantage enabling it to achieve a significant growth rate in foreign sales in 2017 as well: exports of the sector grew by +4.2% on an annual basis, accelerating sales especially in European and East Asian markets. The positive trend of mechanical engineering also drove metalworking product exports, which resumed growth (+9%) after the significant adjustment recorded the previous year.
Quality productions in the fashion sector are increasingly popular with foreign customers.
Pressing the accelerator on product quality and

Fig. 2.3.3 - Trend % variation (*) of exports by quarter. Veneto and Italy - Years 2009:2017



((*) Percentage variation from the same period of the previous year
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 2.3.4 - Share and annual percentage variation of Veneto exports to the main markets - Year 2017



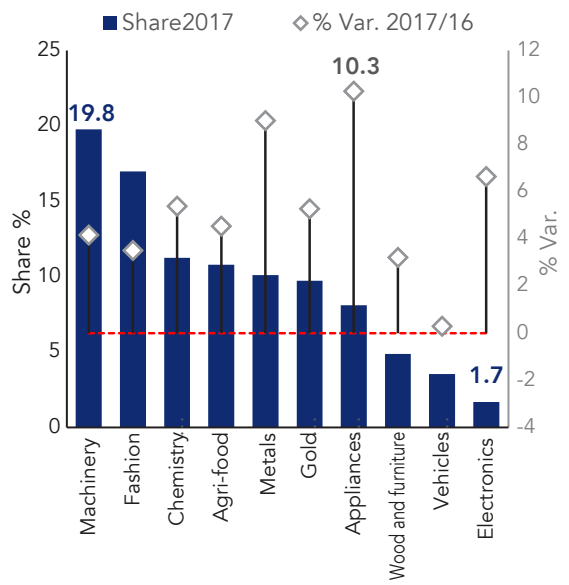
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

refinement seems to be paying off. This is confirmed by the data on foreign sales in 2017: exports of Made in Veneto products exceeded 10.4 billion euros, recording a growth of +3.5% on an annual basis and mainly concentrated in European markets. Chemicals (6.9 billion euros of exports in 2017) recorded a significant growth rate in foreign sales (+5.4% on an annual basis), thanks to the relaunch of investments in related industrial sectors, from petrochemicals to pharmaceuticals. The growth in the foreign turnover of these products was more intense in the European markets and in the USA.
Electrical equipment recorded the strongest percentage increase for exports (+10.3% in 2017), thanks to the relaunch of sales in all the main markets.

Mechanics and fashion, the Veneto specialities best sold abroad

Agri-food production (6.6 billion euros in 2017) grew by 4.5% abroad, thanks to the performance of some of the main sectors - meat production, dairy and cheese, beverage - aimed at European and American customers, who are already used to premium quality and high-end products.
However, businesses in the sector are not neglecting new markets: exports of Veneto food products to Asian markets are growing by more than five points, thanks to the contribution of sales to China. The Asian giant is an increasingly promising market for Veneto businesses, although the numbers are currently still relatively small.
Goldsmithing exports are resuming growth: in absolute terms, exports of jewels to foreign markets have increased by 102 million compared to 2016, when the figures were not positive.
This data highlights the sector's resilience, which despite fierce competition from foreign producers and the devaluation of the dollar against the euro, has managed to increase exports to the American and Asian markets, confirming the dynamism of Veneto businesses focusing on the product's quality and originality.in the growth rate of foreign sales of Veneto eyewear in 2017. The value of foreign sales of businesses in the sector reached 3.7 billion euros, an increase of +3.7% compared to 2016: after a few years characterised by exceptional increases in exports, with double-digit values, the growth rates of exports in the sector have returned in line with the average regional trend. Foreign sales to European and American markets grew with a good intensity in terms of value, while they recorded a significant downturn in the Middle East and Central Asian markets.
The trade balance in Veneto, i.e., the difference between exports and imports, remains positive: it is equal to 15.4 billion euros and is down (578 million less) compared to that recorded in 2016, although it comfortably remains above the pre-crisis levels of 2008. The trade balance with EU markets closed with a positive result of 6.4 billion euros: trade surpluses with France, the United Kingdom, Spain and some of the other EU markets more than compensated for the trade deficit with Germany, which exceeded two billion euros in the last year. more than compensated for the trade deficit with Germany, which exceeded two billion euros in the last year. The trade balance with non-EU markets settled at around 9 billion euros. The trade balance with Asian markets continued to show a negative balance (-1 billion euros with the Far East and 600 million euros with Central Asian countries), while it remained positive in all other geographical areas and reached its highest value in the US market (+ 4.2 billion euros).
At a sectoral level, the Veneto trade balance shows extremely positive values in the mechanical sector (9.1 billion euros surplus), in other manufacturing

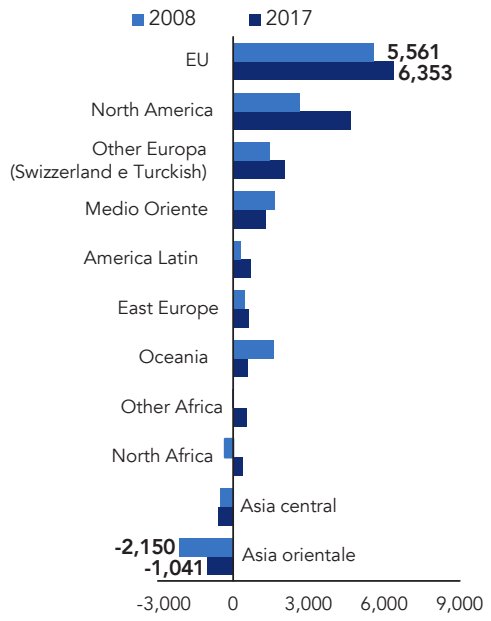
Fig. 2.3.5 - Share and annual percentage variation of Veneto exports by economic sector - Year 20



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

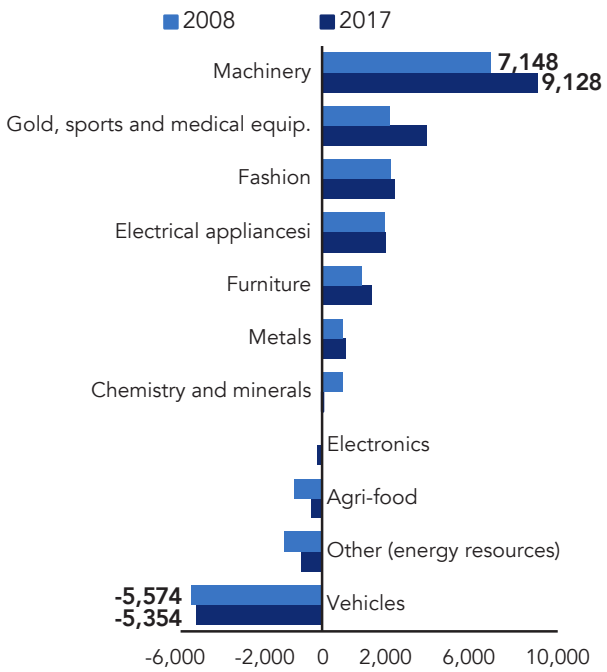
sectors - furniture, jewellery, sports articles and medical supplies - (+4.4 billion), in fashion (+3 billion) and electrical equipment (+2.7 billion), while it shows a strong deficit in the transport sector (-5.4 billion) and agri-food production (-483 million euros), with a trade deficit increasing slightly as compared to the previous year but considerably lower than that recorded in the pre-crisis period.
As far as imports are concerned, economic operators in Veneto bought goods from abroad for a value close to 46 billion euros, equal to +8.4% compared to 2016.
The main sector for regional imports is that of means of transportation (7.5 billion euros, or 16.4% of total regional supplies), followed closely by the fashion sector (7.4 billion), the agri-food sector (7.1 billion) and chemical production (6.9 billion). In terms of performance, imports of "metal products" increased (+14.8% on an annual basis), as did machinery (+12.4%) and chemical production (+10.5%).
The main market for imports is still the European one: 73.1% of imported goods come from the markets of the Old Continent (65.8% from the EU). The purchase of goods from these markets grew by 8.3% on an annual basis.
Imports from other geographical areas also grew, with peaks in purchases from the Middle East (+36.5%), North America (+20.4%), Central Asia (+17%) and Latin America (+14.6%). Growth in imports from East Asian markets was more contained (+3.2%), while purchases from African countries fell (-9.5% on an annual basis).
Germany firmly remains the main trading partner also on the import side (10 billion euros, equal to 21.9% of regional supplies), followed by China, which maintains the values of the previous year (3.8 billion euros), and France (2.8 billion). The purchases from Poland in 2017 recorded a very high trend (+23%) once again, breaking the one-billion-euro mark for the first time.
The increase in imports from the Polish market is mainly due to the increase in supplies of means of transportation and agri-food production the result of different regional trends. Five out of seven pro-

Fig. 2.3.6 - Trade balance by geographical area. Values expressed in millions of euros. Veneto - Years 2017 and 2008



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 2.3.7 - Trade balance by economic sector. Values expressed in million euros. Veneto - Years 2017 and 2008



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Tab. 2.3.1 - Trade with foreign countries by province. Values expressed in millions of euros and annual % variation - Years 2016:2017

	Exports			Imports		
	2017 mln. EUR	% share	% var. 2017/16	2017 mln. EUR	% share	% var. 2017/16
Belluno	3,891	6.3	0.9	820	1.8	-8.9
Padova	9,547	15.6	4.6	6,381	13.9	10.3
Rovigo	1,469	2.4	8.3	2,277	5.0	16.1
Treviso	12,872	21.0	5.6	6,913	15.0	3.2
Venezia	4,698	7.7	2.2	5,677	12.4	11.8
Verona	11,143	18.2	6.8	14,655	31.9	9.5
Vicenza	17,701	28.9	5.6	9,233	20.1	7.7
Veneto	**61,320**	**100.0**	**5.1**	**45,955**	**100.0**	**8.4**

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

vinces recorded a particularly strong annual increase: Rovigo +8.3%, Verona +6.8%, Vicenza +5.6%, Treviso +5.6% and Padua +4.6. The performances of Venice (+ 2.2%) and Belluno (+ 0.9%) were quite stable. As for imports, all the Veneto provinces contributed positively to the growth in the value of regional supplies, with the sole exception of Belluno (-8.9%).

In 2017, Vicenza's exports approached the record threshold of 18 billion euros, accounting for 28.9% of regional foreign sales. Vicenza continues to rank third in terms of value of goods exported to Italy, after Turin (22.1 billion euros) and Milan (41.1 billion euros). The foreign sales of Treviso businesses closed 2017 with almost 13 billion Euros; an excellent result that places Treviso seventh among the Italian provinces for the value of foreign turnover produced. Verona is the tenth Italian province in terms of exports: in 2017, the sold goods abroad for more than 11 billion euros, thanks to the important contribution of agri-food products and machinery.

Padua's share of total Veneto exports stood at 15.6%, keeping the province in fourth place in the region in terms of incidence and in the fourteenth place in Italy, with over 2% of national foreign sales. In 2017, almost 4.7 billion euros of goods were exported by businesses based in the Venice province, with an increase by more than 100 million euros compared to 2016.

Belluno's exports, polarised by the eyewear sector, whose sales abroad represent over 70% of the total export flows of the province, have reached a value close to 3.9 billion euros. Rovigo businesses have benefited from the international trade recovery, registering a new record in the value of goods sold abroad: in 2017, the value of exports from the province was equal to 1.5 billion euros.

2.4 Foreign demand and business performance[5]

Three provinces in Veneto in the top ten national exporters

Veneto's ability to successfully exploit the leverage of foreign demand to promote growth, especially in times of crisis for the domestic component, is beyond dispute, and the more or less recent history of the regional economic system speaks for itself.

What we can ask ourselves, however, is whether the productive fabric is taking full advantage of the export benefits or, taking into account its characteristics, and whether there are businesses that do not currently export but that have all the necessary skills to do so, resulting in positive repercussions on the entire entrepreneurial system.

As will be seen further on, our analysis is based on the combination of information on export operators with Prometeia's corporate financial statements database. Based on this combination, in 2016 exports

5 This paragraph has been written in collaboration with Prometeia

were made by 13,143 limited companies resident in Veneto, which represent 15% of the regional total. However, exports are concentrated to a small number of exporters: one tenth of the latter covers 80% of exports. When considering the value of exports, about one third of the businesses analysed export for a substantial value, more than one million euros; on the other hand, there is an even larger group of businesses that export for less than 100 thousand euros, a value that is insufficient to justify the implementation of a complex internationalisation strategy.

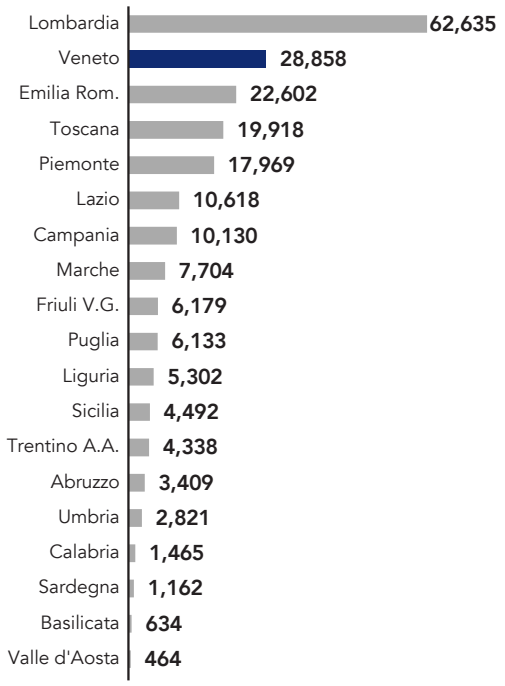
This is the point: in order to fully benefit from an export premium, i.e., an advantage on the business's performance that is solely attributable to export activity, it is not enough to act as a passive operator, executing an order that has arrived from abroad but is of a limited value. Rather, the export premium should be associated with a real strategy of opening up to international markets, with an articulated activity to be implemented systematically. In this analysis, therefore, the quantification of the premium abroad derives from a comparison between the Veneto businesses for which selling abroad represents a significant part of their business activity and those that, despite presenting similar structural characteristics to the former, do not export. Therefore, following this approach, even in Veneto, where the internationalisation processes of businesses are undoubtedly more rooted and long-lasting than in the Italian entrepreneurial fabric, there is room for growth: if a group of about 1,100 potential exporters, identified through a statistical matching procedure, were to initiate an internationalisation strategy, an additional turnover of 470 million euros would be generated, equal to 1.3% of the industrial added value of the region.

Furthermore, based on estimates, the ability to gain competitiveness through intangible assets and the enhancement of human capital, a low level of debt and a relatively large company size are key to increasing the likelihood of becoming a large, regular exporter.

In order for potential[6] exporters to be able to understand this step, however, policy choices must continue to facilitate and encourage this process, supporting businesses and strengthening their operating environment. The relationship between internationalisation and economic growth has been the subject of numerous analyses aimed at quantifying the extent to which a business's ability to successfully approach foreign markets reflects positively on its performance. Theoretically, the best performance of exporting businesses can be linked to a number of factors. A part of the economic literature mainly identifies these factors in a self-selection process that favours exporting businesses that would be structurally more solid than the others because they would be able to meet the costs necessary to start the internationalisation activity. The ability

6 Prometeia's database of corporate financial statements contains the non-consolidated financial statements of more than 900,000 Italian non-financial limited companies, from 1990 to the last available year (2016). The financial statements data, updated monthly with the Bureau Van Dijk source flows, are reclassified in a homogeneous manner and subsequently checked, eliminating those with strong discrepancies and obvious errors.

Fig. 2.4.1 - Export operators by region of origin of the goods. Year 2016



Source: Processing of data from ISTAT and Prometeia by the Statistics Office of Regione Veneto

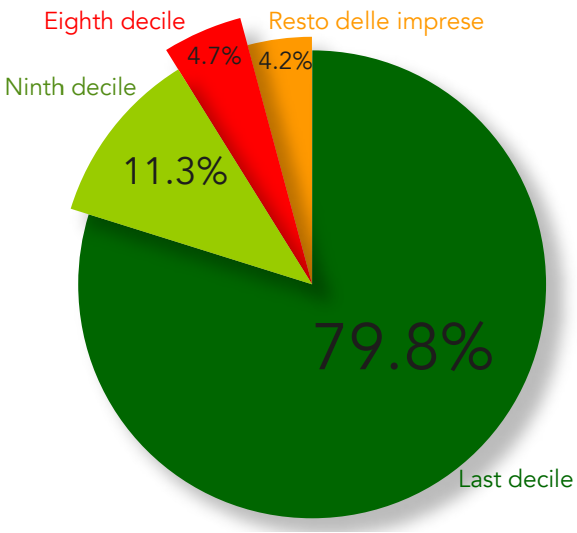
to bear the costs of, for example, transporting goods, using appropriate distribution channels, marketing and adapting products to consumer tastes would be an important differentiator from non-exporting businesses.

There is further room for growth

Another element that is often cited to justify performance differences is the ability of exporting businesses to benefit from a virtuous process of learning by exporting. Dealing with international markets strengthens the wealth of knowledge of businesses that come into contact with new production techniques, new technologies and new management skills. In addition, higher productivity would also be linked to the more competitive international environment, which requires businesses to push for efficiency and innovation.

In relatively recent years, economic theoretical literature has been accompanied by empirical studies of a microeconomic nature, based on data relating to individual businesses.

Fig. 2.4.2 - % distribution of exports among exporting businesses (*) residing in Veneto - Year 2016



(*) Limited liability businesses
Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

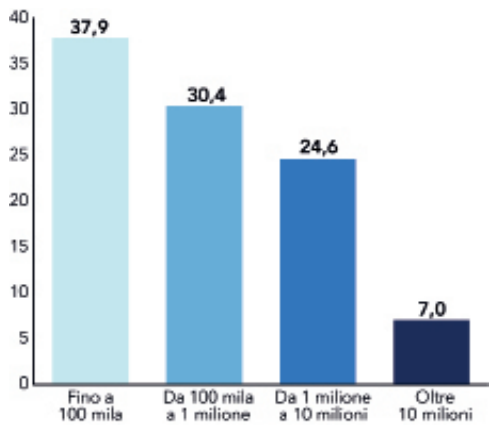
This approach has been facilitated by the increasing availability of data at business level as well as the refinement of the most appropriate estimation techniques. The researchers' attention has focused in particular on the evaluation of the export premium, i.e., on the quantification of the advantage that exporting businesses have over non-exporters in terms of turnover and productivity growth.

verify the indications deriving from the theoretical analysis on the Veneto reality, and to measure the export premium of Veneto businesses.

This analysis is based on the construction of a sample of Veneto-based businesses that are active on foreign markets. In addition to information on sales abroad, the 2010-2016 financial statement data6 of each business in the sample was considered. Tohighlight the most important characteristics associated with the export activity, a preliminary analysis of a descriptive nature was carried out, based on an appropriate segment of the exporting businesses. First of all, regular exporters7 were taken into account in order to compare them with businesses that export rarely and on a discontinuous basis. The performance of Veneto businesses in the period under examination confirms the results highlighted in the economic literature.

The turnover of regular exporters grew more than that of occasional exporters. On average, this is

Fig. 2.4.3 - % distribution of the exporting businesses (*) residing in Veneto by export class (euro) - Year 2016



(*) Limited liability businesses
Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

a relatively limited advantage, but in recent years the gap has widened, indicating a greater ability to reap the benefits of a more favourable national and international context.
As far as profitability is concerned, regular exporters are characterised by an higher average ROI8.
A better situation in terms of marginality can be attributed to various factors. First of all, constant activity on foreign markets pushes businesses to increase the competitiveness of their production with respect to a wider and harsher range of competitors. In addition, greater openness to foreign markets promotes efficiency gains on the supply side as well. Finally, the regular[7] exporting businesses are characterised by a lower degree of indebtedness than occasional exporters. The former, therefore, enjoy greater financial stability, an important presupposition to face a structured and complex internationalisation activity.
This first exploratory analysis shows that Veneto regular exporters display, as suggested by theoretical analysis, better budget performance than those that do so in a marginal and discontinuous way.
However, in order to quantify the export premium, a more rigorous assessment is required, i.e., to measure the positive effect of the export activity on the performance of the businesses, isolating it from other factors that might affect the performance.

Veneto businesses that regularly export are in a better position than occasional exporters.

When anomalies are found in the balance sheets of major companies, the financial statements are retrieved from alternative sources (Cerved or the company's site, when available). In the event that the initial financial statements do not contain all the information needed to reconstruct the standard reclassification[8] scheme (as is the case for the abbreviated financial statements, and for a part of the IAS/IFR financial statements), some financial statement items that are not directly available are appropriately estimated.

Geographical diversification and high innovative content of exports amplify the export premium the impact of the export activity by Veneto businesses, the matching method was used, according to which a business that possesses a certain characteristic is associated with another that does not.
In our case, in the sample of regular exporters, we have selected the businesses that export more intensively, i.e., those for which the export activity has a more consistent weight on the total turnover[9]. The analysis methodology adopted (propensity score matching) has made it possible to match each of the approximately 3,600 businesses thus selected (called "big regular exporters") to its nearest neighbour, i.e., the nearest business that does not export although having a series of characteristics similar to that of the exporter.
The identification of the two business groups makes it possible to measure the export premium by comparing their economic performance. The model also includes appropriate control variables, such as size, intensity of tangible
In particular, it should be noted that with all other conditions being equal, the advantage directly attributable to exporting business is 22% in terms of turnover and 5.6% in terms of labour productivity.
The advantage of exporting is higher if the business has a greater geographical differentiation of exports. Moreover, businesses that have been able to implement an internationalisation strategy in different markets are less vulnerable to demand shocks located in specific areas. As far as the export sectors are concerned, a higher premium is associated with businesses that mainly export goods with a high innovative content10 . Since innovation has been measured by patent intensity (ratio between the number of patents and the turnover), the result highlights the advantage associated with so-called codified innovation, which can be a particularly important factor in accessing international production chains.
As is logical to expect, it takes time for the export activity to fully reap its benefits on the performance of businesses. In order to investigate the relationship between the time factor[10] and the export premium, a new estimate has been made.
Again with reference to the 2010-2016 period, businesses that started to export regularly in that

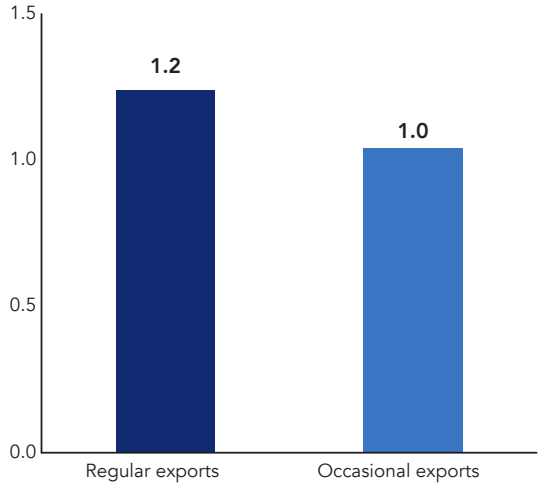
7 More precisely, regular exporters means businesses which continuously exported between 2010 and 2016.

8 ROI (Return On Investment) is an index used to indicate the profitability of the capital invested. It is the ratio between the overall operating result achieved in a given year and the average capital invested during that year.

9 The threshold has been set at 10%

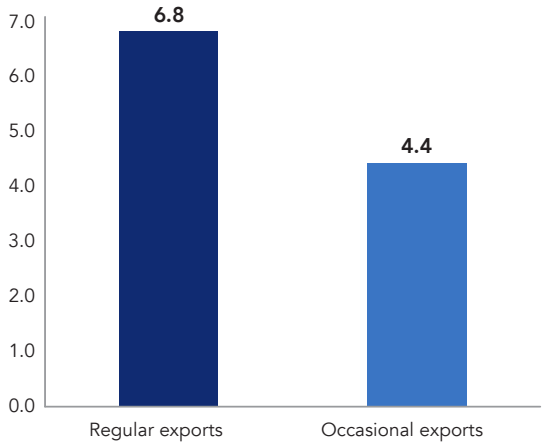
10 In this case the analysis was limited to intermediate and investment goods.

Fig. 2.4.4 - Regular and occasional exporters: turnover growth. Veneto - Annual % average 2011-2016



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

Fig. 2.4.5 - Regular and occasional exporters: ROI(*). Veneto - Annual % average 2011-2016



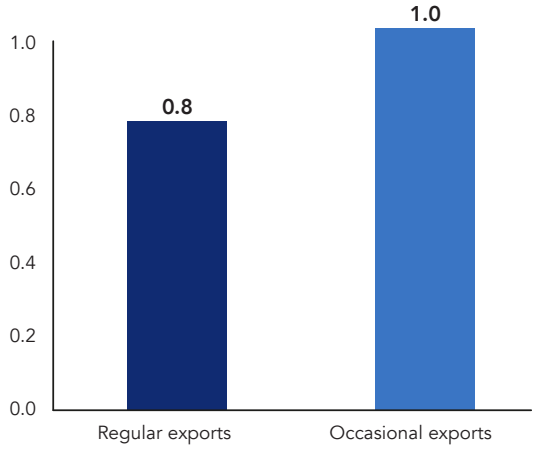
((*) ROI (Return On Investment) is an index used to indicate the profitability of the capital invested. It is the ratio between the overall operating result achieved in a given year and the average capital invested during that year.
Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

Geographical diversification and high innovative content of exports amplify the export premium

period were taken into account, while regular exporters were not considered. The former is a group of businesses (just over 800) that are undertaking a path of internationalisation or for which the export activity has suffered a setback of at least two years. Each business in the cluster is then matched with a similar but non-exporting business, again according to the propensity score matching method; compared to the previous estimate[11], the advantage is that this second group tangible and intangible fixed assets, profit per worker, and sector of the businesses in order to adequately specify the can also include the first business, whose performance will be referred to the period prior to the start of a more systematic export activity. Figure 2.4.9 shows the export premium trend in the first years of the internationalisation process. It is interesting to note that at the

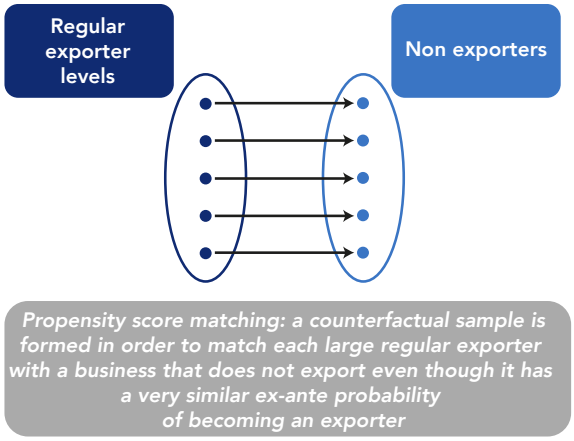
11 The export premium estimated on these two clusters is more modest than that previously quantified. This is an expected result, because in the first case the premium is associated with a more consistent and consolidated export activity.

Fig. 2.4.6 - Regular and occasional exporters: leverage(*). Veneto - Annual % average 2011-



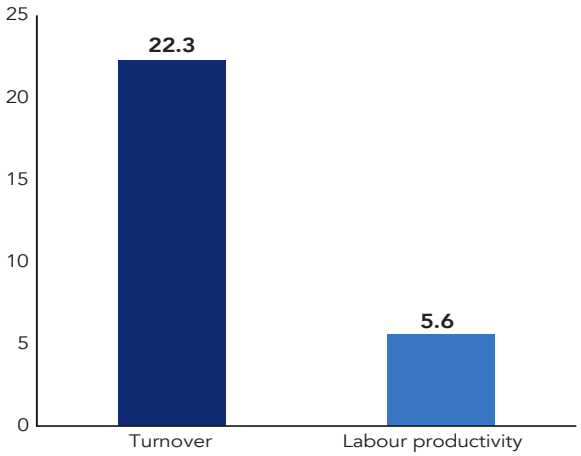
((*) Leverage is an indicator used to measure a business's indebtedness. This is the debt to equity ratio of a business.
Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

Fig. 2.4.7 - The propensity score matching



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

Fig. 2.4.8 - The export premium on turnover and productivity. Veneto -% values



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

start of the activity (time t) the impact is negative; however, as soon as in the first year an advantage emerges related to internationalisation, and this advantage increases further the following year.

The export premium of Veneto businesses in 22%

Initially, undertaking an internationalisation strategy could have a negative impact on turnover, but the efforts connected with the conquest of foreign markets are progressively repaid in the following years.

Based on the empirical analysis of Veneto businesses, the concept of learning by exporting is confirmed, highlighted by theoretical studies: with the consolidation of export activities, businesses benefit from economies of scale, new skills and innovations acquired through contact with international clients, and are stimulated by the fiercest competition to boost the competitiveness of their production.

The estimates described above can be used to outline a development potential for Veneto businesses. It should be noted that building up growth potential depends crucially on the assumptions made ex ante. In our case, for example, we could quantify the additional turnover associated with the hypothesis that all the Veneto businesses that, although having characteristics similar to the former, currently target the domestic market, become big regular exporters.

Such an ambitious scenario, however, would undoubtedly have a significant impact, but would undermine the credibility of the scenario itself. Therefore, what we intend to do is to build a growth potential of Veneto businesses that incorporates the estimates described above and is based on reasoned and plausible assumptions.

More specifically, a group of around 1,100 businesses was selected from among the non-exporters that were closest to the regular big exporters and among occasional exporters. The potential has been built on the assumption that these businesses would become big regular exporters.

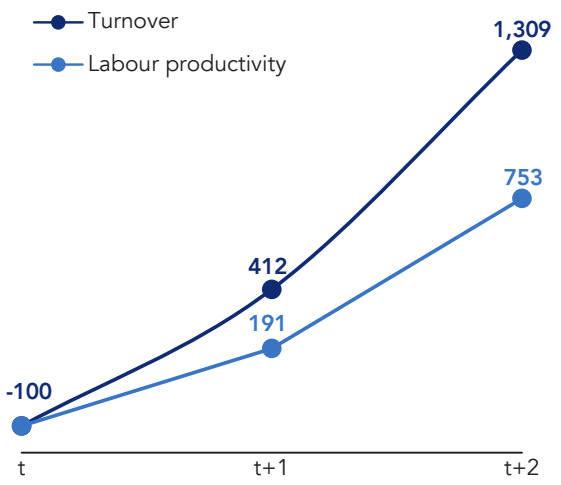
The results of the econometric analysis described above were applied to the turnover of businesses in the new cluster.

The attribution of the export premium to the businesses of the cluster has been carried out in a balanced way, considering an impact that is more consistent for the non-exporting businesses and more modest for those which, even if in a more marginal and discontinuous way, do export.

If the businesses in the cluster were to become major exporters,

this would generate an additional turnover of around 470 million euros, equal to 1.3% of the industrial value added of the region.

Fig. 2.4.9 - The trend of the export premium at the start of the export activity. Veneto - Start year index no. = -100



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

The results of the simulation show that aligning those businesses that have already approached foreign markets, albeit not systematically, or that do not export but have characteristics compatible with a more structured development of exports, with the group of big regular exporters, would result in substantial advantages which represent the right stimulus to strengthen the process of internationalisation of the regional production system. The specification of econometric models allows the extraction of useful information on those variables that most affect the likelihood of implementing a structured export strategy. Among the factors that play a leading role is the share of intangible fixed assets in total assets.

Learning by exporting works for Veneto businesses: the longer you export, the greater the benefits on your turnover and productivity.

This is an interesting result as it highlights the importance of knowledge and intangible assets in successfully outlining and implementing complex and articulated processes. Patenting and more generally, all forms of codified protection of products, place businesses that are part of the international supply chain or that want to attract new consumers in an advantageous position by leveraging on the formal as well as substantial quality of their products. Investment in research, new technologies and innovative managerial skills are also crucial to international competitiveness.

Another element that has a certain weight in increasing the likelihood of activating lasting export processes is labour cost per worker, an indicator that can be interpreted as a proxy for the qualification of personnel.

Therefore, our empirical analysis confirms the importance given by theoretical literature to the availability and enhancement of human capital in the activation of complex development processes. Moreover, a virtuous circle could be created between qualified human capital and exports, whereby the export of goods incorporating a high level of skills stimulates businesses to acquire new and more sophisticated knowledge, further qualifying the workforce. The business size, measured according to the number of employees, also has a positive impact (but with a relatively lower intensity compared to previous factors) on the likelihood of actively exporting.

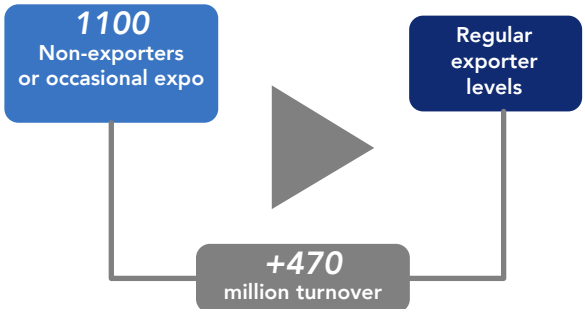
It is a widely known and consolidated result: a big-sized business is better equipped to deal with the fixed costs associated with the implementation of an internationalisation strategy.

However, the lower intensity of the coefficient is also proof of the ability for small- and medium-sized businesses in Veneto (and Italy) to face international markets, even though they are still some way from their main international competitors.

470 million euros turnover for a cluster of 1,100 businesses that become big regular

Finally, the parameters of the econometric estimates show an inverse ratio between leverage (financial debt to equity) and the likelihood of exporting financial equilibrium is unlikely to be able to activate innovative processes aimed at strengthening the competitiveness of its products and making the structural investments (in distribution channels, logistics, promotion, etc.) necessary to implement a successful internationalisation strategy.

Fig. 2.4.10 - The growth potential of businesses



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

2.5 Domestic trade: the dichotomy between digital and neighbourhood stores

The national context

2017 closed with modest sales growth of +0.2%, the result of a 1.4% increase in large-scale retail distributors (within which there was a 3.2% growth in discount food shops) and a 0.8% decrease in sales for small-scale retail outlets. However, the confidence in the retail sector businesses continues to grow: expectations on the volume of orders, sales and employment remain positive for the whole of 2017. B2c Commerce (Business-to-consumer) is increasingly important: the B2c eCommerce Observatory at the Politecnico di Milano estimates that in 2017 the value generated by online purchases worldwide exceeded 2,000 billion euros and that the main markets were China, the USA and Europe. In 2017, eCommerce was characterised by alliances between eCommerce merchants with the aim of expanding commercially, and it was also the year in which certain technological trends aimed at simplifying the online customer experience became established. In addition, the main eCommerce events such as the Single Day in China or Black Friday and Cyber Monday in the USA and now also celebrated in Italy.

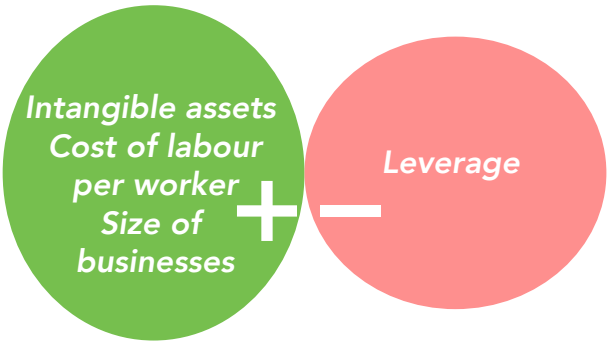
Accumulation of intangible capital, qualification of human capital, financial equilibrium and size are the characteristics of the potential exporter

In Italy, online purchases by consumers exceeded 23.6 billion euros in 2017, with an increase of 17% compared to the previous year. In 2017, the products purchased were worth 12.2 billion and grew by 28%, exceeding the services offered for the first time, which instead amounted to 11.4 billion, +7% compared to 2016. Tourism confirmed its position as the leading sector, with purchases estimated at 9.2 billion euros, +7%, followed by computing and electronic appliances (4 billion, +28%) and clothing (2.5 billion,
+28%).
Among the emerging sectors, the most important are those related to furniture and home living and food&grocery, which together are worth almost 1.8 billion euros.
Not only sales volumes are increasing, but also users: in 2017 there were 22 million web shoppers, up by 10% were made via smartphones or tablets. The incidence of these devices has increased fivefold in 5 years, thanks particularly to smartphones, which generated purchases for over 5.8 billion euros, up 65%..

Veneto

In 2017, there were 49,605 fixed commercial businesses in Veneto, down 0.6% compared to 2016, perfectly in line with the Italian average (-0.6%); they were negatively affected by the sharp reduction in the number of business premises, -1.5%, against an increase in the number of local units dependent on other premises, +1.1%.

Fig. 2.4.11 - Factors affecting the likelihood of active exporting



Source: Processing of data from ISTAT, Bureau Van Dijk and Prometeia by the Statistics Office of Regione Veneto

The businesses where the commercial activity is of a secondary nature increased slightly: +0.5%.
However, Veneto's fixed commercial businesses continue to represent 6.7% of the national total, taking sixth place behind Campania, Lombardy, Lazio, Sicily and Puglia.
The businesses specialising in the sale of IT and telecommunications equipment and in the sale of transport fuel are the only ones to record an increase in 2017: +1.3% and +0.7% respectively compared to 2016. + +0.7% compared to 2016. The number of businesses specialising in food, beverages and tobacco and those specialising in other products remained more or less stable, -0.3% both.
More significant contractions were recorded for activities specialising in the sale of cultural and recreational items (-2.4%), and for those specialising in the sale of products for domestic use (-2.5%) compared to 2016.
Verona is the only province in Veneto to see a slight increase in retail activities, with +0.5%; Belluno, Rovigo and Vicenza, on the other hand, are those most affected by the difficulties in the sector, respectively -1.4%, -1.1% and -1.1% compared to 2015.

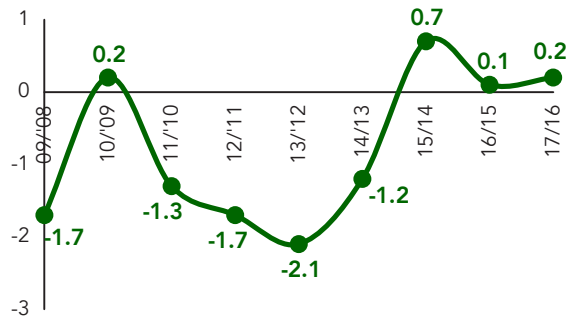
Business-to-consumer e-commerce keeps its pace

The number of fixed commercial businesses in the provinces of Venice and Padua was down, but substantially unchanged, at -0.6% fixed retail outlets fell by -0.6% and that of intermediaries by -1.1%, there was an increase of +2% in the number of commercial businesses operating in the sale and repair of cars and motorcycles.
Itinerant trade was even more affected than fixed businesses by the fall in sales: in 2017 there was a fall in itinerant sales of -2.2% compared to 2016.
On the other hand, the performance of sales Treviso (1.01 million parcels, + 82%).
A substantially positive year for large-scale retail distribution outside of shops, counters and markets was positive,
up by 1.6% compared to last year. In particular, for the latter sales channel, mail order business grew by +1.2%, but it was still e-commerce that recorded the best results: +4.4% compared to 2016. In Veneto, 1,339 businesses, mainly located in the provinces of Padua, Verona and Vicenza, use the Internet exclusively to sell their products.
According to a survey by the Alkemy Observatory, Veneto is one of the first regions, together with Lombardy and Lazio, in terms of the number of online product orders. On average there are over 30 online purchases per 100 inhabitants with the following distribution among the provinces: Belluno with 39.1 orders per 100 inhabitants, followed by Padua with 37.7, Verona with 37.5, Rovigo with 37.1, Vicenza with 35.6, Venice with 32.6 and Treviso with 30.8.

Fixed retail continues to shrink, internet-based retail continues to grow

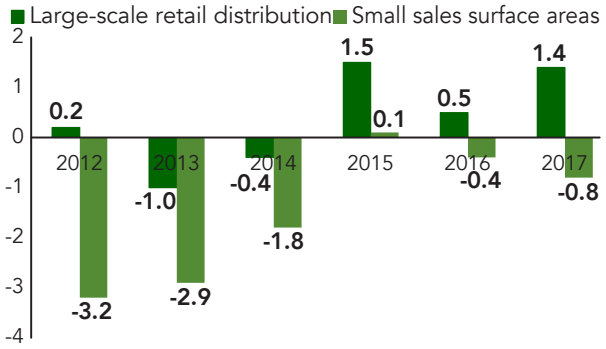
The figures for the Italian postal service (Po-

Fig. 2.5.1 – Variazione percentuale annua delle vendite del commercio fisso al dettaglio. Italia - Anni 2009:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

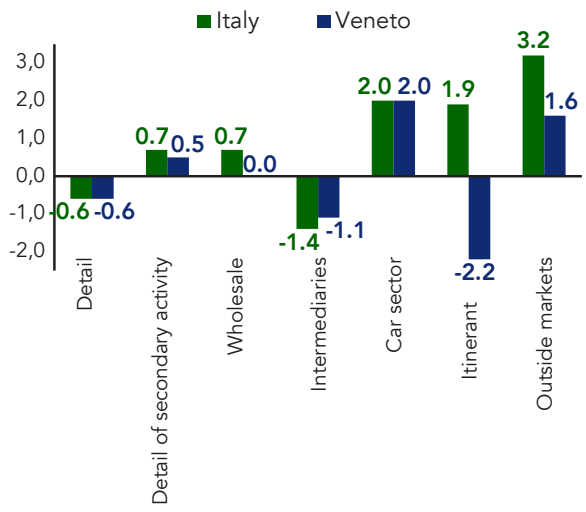
Fig. 2.5.2 – Annual percentage variation in the value of sales of large-scale retail distributors and small-scale retail outlets. Italy - Years 2012:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

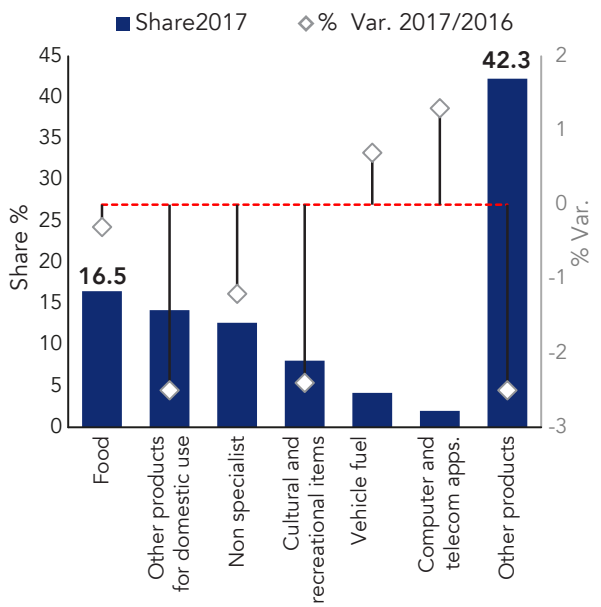
ste Italiane/SDA), although partial in relation to the total for logistics businesses, confirm this trend.
In Veneto, in 2017, 5.8 million parcels were delivered; the items most ordered by customers were clothing products (52%), books/magazines (45%) and mobile phones and tablets (37%). The province with the highest number of deliveries is Verona (1.35 million parcels, +57% compared to 2016), while the province with the highest increase compared to last year is As regards large-scale retail distribution, the data is usually available one year later, so the following analysis refers to 2016.
In 2016, the trend of the large-scale retail distribution was positive overall: the amount of related commercial businesses grew by 0.2%, the workforce by 2.6% and sales surface areas by 1.7% compared to 2015. In detail, the growth of the more structured forms of distribution continued: there was a substantial increase in specialised areas, from in the number of businesses (+12.7% per year) to that of workers
(+8.8%) and in sales areas, 8.3%. Department stores, supermarkets and hypermarkets increased their number of workers by +1.5%, despite the closure of some businesses in the provinces of Venice, Rovigo and Vicenza (-0.8% compared to 2015).
Mini-markets remained stable overall compared to the previous year: 0.0% for their number, +0.7% for workers and -0.22% for the sales surface area.
In order to analyse the dimensional development of the modern network through data standardised with the demographic weight, the indicator "ratio of sales surface area per 1000 inhabitants" has been developed, distinguishing the two food and non-food sectors[12]. Valle d'Aosta also has a particularly high share in the non-food sector, equal to two thirds of the total (more than 68%).
At the bottom of the list is Molise with 220.1 square meters, which stands out along with Basilicata for the strong use of the available sales surface area for the sale of foodstuff (less than 25%

Fig. 2.5.4 – Commercial businesses by type: 2017/16 percentage variation. Veneto and Italy



Source: Processing of data from the Italian Ministry of Economic Development by the Statistics Office of Regione Veneto

Fig. 2.5.3 – Share and annual percentage variation of fixed place commercial businesses by commercial specialisation. Veneto - Year 2017



Source: Processing of data from the Italian Ministry of Economic Development by the Statistics Office of Regione Veneto

E-commerce boom in Veneto as well

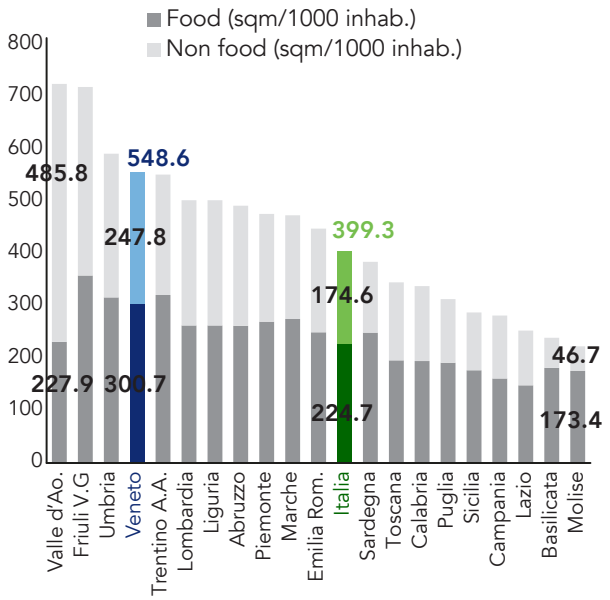
12 For the food sector, the surface areas of Department Stores, Supermarkets and Hypermarkets Minimarkets Specialist sales surface areas

non-food and more than 75% food, almost 80% for Molise).
The national total of sales surface areas is composed of more than 224 square meters in the food sector and more than 174 square meters in the non-food, amounting to just over 399 square meters per thousand inhabitants. The geographical distribution is not equal: the North-East is the most equipped region, with a total sales surface area of about 523 sqm per thousand inhabitants, followed by the North-West with about 477 sqm per thousand inhabitants, and then, further behind, Central and Southern Italy with values respectively equal to little more than 329 and 309 sqm per thousand inhabitants.

A substantially positive year for large-scale retail distribution

Veneto is one of the regions with a large sales surface area compared to the number of its inhabitants, the fourth in the ranking, with 548.6 square meters per thousand inhabitants, 300.7 of which are for the food sector and 247.8 for non-food.
Among other regions, in first place is Valle d'Aosta with 713.7 square meters per thousand inhabitants, followed by Friuli Venezia Giulia with 708.1 square meters. At the to supermarkets, minimarkets and the food part of hypermarkets are counted; for the non-food sector, the surface areas relating to department stores, large specialised chains and the non-food part of hypermarkets are counted.

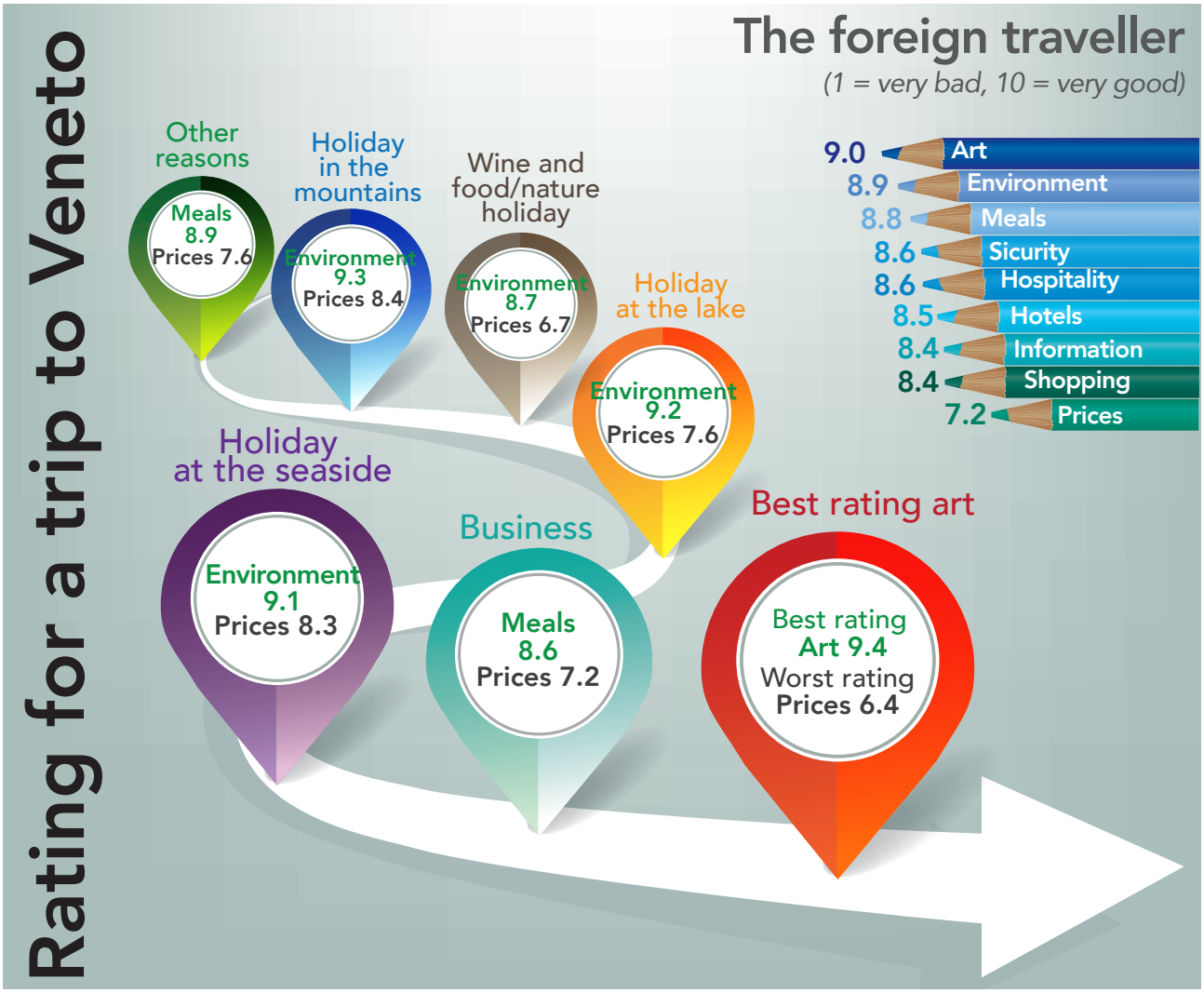
Fig. 2.5.5 – Large-scale retail distribution: Sales surface area per 1,000 inhabitants by region - Year 2016



Source: Processing of data from the Italian Ministry of Economic Development by the Statistics Office of Regione Veneto

THE UNIQUENESS AND VARIETY OF VENETO TOURISM

2017 rides the wave of the previous year, exceeding every historical record: in Veneto over 19 million tourist arrivals and almost 70 million presences, with increases compared to the previous year of 7.4% and 5.8%, respectively.
The suggestion to increase the contribution of tourism to the local economies, society and sustainable well-being has also been highlighted by the new 2017-2022 Strategic Tourism Plan "Italy as a Country for Travellers" . Faced with a constantly evolving context, the Plan proposes some precise guidelines and identifies strategic intervention guidelines to help Italy acquire a new leadership, based on sustainability, innovation and competitiveness, while integrating the theme of responsible enhancement of regional, environmental and cultural heritage into tourism policies.
Therefore, it focuses the attention towards developing new destinations and new products, supporting the design of new itineraries, able to connect the most attractive areas with those of lowest tourism density and shift tourism flows to the lesser known but equally as attractive areas.
In this context, the analysis conducted aims to describe the current situation, providing an answer to some questions on "tourist profiling": how often does the foreigner who chooses Veneto for a leisure trip or holiday, plan a tour with stays in different places? And which destinations are combined?
A focus on foreigners is quite important, considering that they represent 65.3% of total arrivals in Veneto, an increase of 8.6% in the last year alone.



New all-time record for tourism in Veneto Veneto

The 2017 tourism boom

In 2017 Veneto set a new all-time record, both for the number of tourists who stayed there and for the total number of nights. The year just ended closed with 19.2 million arrivals (+7.4% compared to 2016) and 69.2 million presences (+5.8%), never reached before figures.

These results are due to the completeness of the offer in a region, Veneto, that is crossed in 3-4 hours by car: cities of extraordinary beauty, over 100 km of beaches, magnificent mountains, natural parks, Lake Garda and spa systems, all enriched by excellent food and wine and the ability to invest in quality, enhancing the offer with innovative proposals, knowing how to satisfy guests in the best way, looking for new experiences. To provide new experiences, the most imaginative of the many initiatives should be remembered: Veneto has provided the opportunity to accommodate tourists in real tree houses, in accommodation made from wine barrels, and soon also in floating accommodation, on stilts or in caves, all forms of tourism already widespread in Europe. In the context of the current period of socio-political uncertainty, it can be stated once again that tourism is an important sector for Veneto economy, both for the wealth it produces directly and for the economy induced upstream and downstream of tourism: the approximate 17 billion euros produced by the sector's long chain in 2017 - up 6% on the previous year - represent more than 10% of regional GDP[1].

The Veneto tourism proposal is gaining increasing support from foreign customers and in recent years has also benefited from the return of Italians, thanks to a trend reversal that has started in 2015 and which, however, has not yet brought the region back to the number presences recorded prior to the economic crisis.

Strong foreign interest and the return of Italians

The attractiveness of Veneto is also benefiting from the geopolitical situation of the 2015

1 The estimate, from CISET, takes into account the direct, indirect and induced multiplier effects.

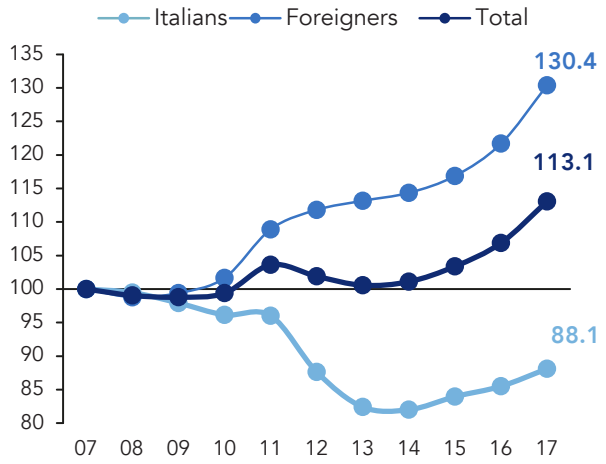
Tab. 3.1 - Tourist movement by origin and accommodation. Veneto - Year 2017

Absolute valuesi	Hotels		Extralberghiere		Total structures	
	Arrivals	attendance	Arrivals	attendance	Arrivals	attendance
Italians	4,633,165	11,305,795	2,027,451	10,778,124	6,660,616	22,083,919
foreigners	8,133,844	21,771,734	4,378,116	25,328,429	12,511,960	47,100,163
Total	**12,767,009**	**33,077,529**	**6,405,567**	**36,106,553**	**19,172,576**	**69,184,082**

Percentage variations 2017/16	Hotels		Extralberghiere		Total structures	
	Arrivals	attendance	Arrivals	attendance	Arrivals	attendance
Italians	4.0	2.2	8.1	3.9	5.2	3.0
foreigners	5.0	2.9	15.9	11.0	8.6	7.1
Total	**4.6**	**2.7**	**13.3**	**8.8**	**7.4**	**5.8**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Fig. 3.1 - Numero indice (*) delle presenze di turisti (anno base = 2007). Veneto - Anni 2007:2017



(*) Numero indice = (presenze anno t / presenze anno base) x 100
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati provvisori Istat - Regione Veneto

(+14.4%), Treviso (+11.9%) and the metropolitan city of Venice (+8%), which alone welcomes about half of the tourists arriving in Veneto; there have also been sharp increases in the provinces of Verona (+6.3%), Rovigo (+5.4%), Padua (+4.7%) and Belluno (+3%). Presences, which indicate the total overnight stays in all accommodation facilities, show more limited variations, as usual.Mediterranean basin, which has ended up rewarding destinations perceived as safer.

Growth in all regional areas

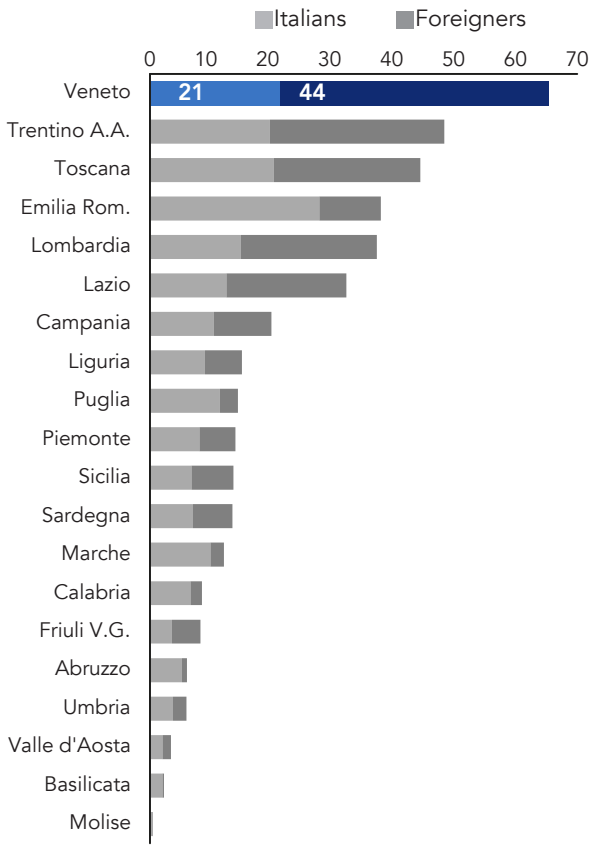
These excellent results therefore reflect a good year for international tourism (+8.6% in arrivals, +7.1% in presences and +8.4% in expenditure) and national tourism (arrivals +5.2% and presences +3%).
Veneto has been the leading region in Italy for several years, both in terms of the number of arrivals (15.3% of the entire peninsula) and in terms of presences (16.2%), as was also confirmed for 2016, the last year for which data is available at a national level. Veneto differs from other regions due to its strong foreign presence, only similar to that of Lazio, Lombardy, Trentino Alto Adige, Friuli Venezia Giulia and Tuscany, and in particular, for the high proportion of tourists who choose to stay in non-hotel accommodation.
This data provide a detailed picture of those who spend at least one overnight stay in is almost exclusively cars, only 8% use trains.
Daily excursions linked to shopping are becoming more and more common and in 2016 they involved about 7% of the cases.
For a rough indication of the number of individuals who gravitate towards Veneto for travel or leisure, work and a multitude of other reasons but excluding accommodation facility for holiday, business, well-being, care, sport, religious purposes, etc. All the analysis made disregard daily tourism, which is

Tab. 3.2 - - Tourism in the provinces. Year 2017

	2017 (millions)		% var. 2017/16		% var. 2017/16 hotel sector	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Belluno	1.0	3.8	3.0	-4.2	5.8	3.4
Padua	1.9	5.5	4.7	3.6	3.5	1.1
Rovigo	0.3	1.6	5.4	1.0	7.6	3.3
Treviso	1.0	2.0	11.9	12.3	10.0	9.3
Venice	9.5	37.0	8.0	7.6	4.5	4.1
Verona	4.8	17.3	6.3	4.6	1.8	-1.2
Vicenza	0.8	2.0	14.4	8.2	13.6	5.9
Total	**19.2**	**69.2**	**7.4**	**5.8**	**4.6**	**2.7**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Fig. 3.2 - - Presence of tourists in Italy by region visited and origin (millions). Year 2016



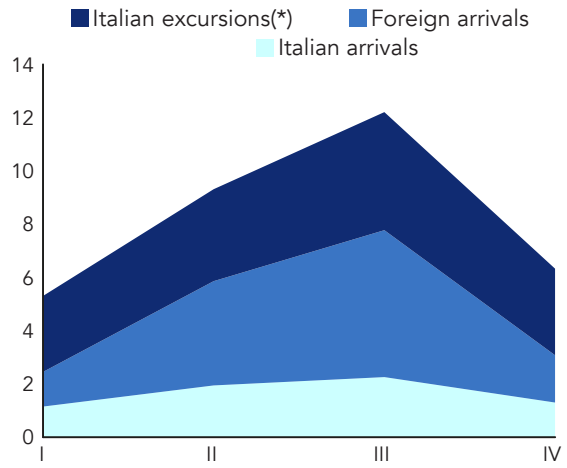
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Who are those who appreciate Veneto tourism destinations?

Veneto attracts more and more tourists, but which markets are playing an important role in the growth of flows to each type of destination?

Veneto has always been appreciated for the variety of its tourist offer and for its hospitality culture that defines it, and is ever attentive to the needs of a

Fig. 3.3 – Overnight tourists and excursionists by quarter and origin (millions). Veneto - Year 2017



(*) Daily travels on holiday or for business purposes, excluding routine travels. Year 2016
Source: Processing of provisional data from ISTAT by the Statistics Office of Regione Veneto

however significant in Veneto.

ISTAT estimates that Italian excursions to Veneto in 2016 were close to 14 million, including movements outside their usual environment in this figure and excluding those for routine activities, linked to commuting rather than the phenomenon of tourism.

As the return trip takes place on the same day, excursionists are mainly from Veneto, followed by neighbouring regions, the means of transportation used short distance travel related to mobility, please see the following graph. The quantities recorded in the various periods of the year are indicated, with a peak in the summer quarter July-September exceeding 12 million and an annual total of over 33 million.

for those who appreciate art, breathtaking mountain panoramas, lakes, lagoons, etc. Compared to the previous year, Italian tourists increased by 5.2% in number and 3% in overnight stays, while foreign tourists increased by 8.6% and 7.1%, respectively. International tourism, the growth of which only slowed down at the beginning of the global economic crisis and has been timidly resuming since 2009, today shows increasing approval by all the most loyal customers: Germans (+8% in admissions), Austrians (+5.2%), British (+1.1%),

Americans (+13.6%), French (+6.8%), Swiss (+0.5%), and Danish (+2.7%). The number of Chinese tourists, after the peak of 2015 which was probably due to Expo Milano, recorded a downturn in 2016, but is

Tab. 3.3 - Ranking of presences by origin of tourists. Veneto - Year 2017

	Presences	% share of the Veneto total	% var. 2017/16	% var. 2017/07
Italy	22,083,919	31.9	3.0	-11.9
Germany	16,509,200	23.9	8.0	40.4
Austria	3,840,616	5.6	5.2	17.6
UK	2,625,616	3.8	1.1	5.5
Netherlands	2,468,945	3.6	-6.3	3.4
USA	2,054,306	3.0	13.6	9.8
France	1,994,301	2.9	6.8	9.2
Switzerland-Liecht.	1,876,964	2.7	0.5	42.3
Denmark	1,328,095	1.9	2.7	10.6
Poland	1,164,772	1.7	12.8	92.3
Czech Republic	1,122,756	1.6	20.3	48.8
China	977,127	1.4	21.1	201.2
Russia	850,900	1.2	24.4	100.5
Belgium	755,985	1.1	3.8	23.5
Spain	754,990	1.1	5.2	-24.4
Hungary	698,575	1.0	20.7	2.6
Ireland	479,195	0.7	13.7	32.0
Australia	452,935	0.7	10.3	37.4
Romania	442,296	0.6	5.3	20.5
Brazil	405,893	0.6	22.8	95.9
South Korea	370,257	0.5	10.3	151.2
Canada	365,399	0.5	10.0	17.4
...	...	...	...	...
Total	69,184,082	**100.0**	**5.8**	**13.1**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statiss Office of Regione Veneto

now rapidly returning to grow (+21.1%), reaching 741 thousand arrivals and 977 thousand presences. 94% of Chinese tourists arriving in Veneto have a city of art as their destination, while the accommodation facilities used are mostly hotels (93%). Their average daily expenditure is among the highest, estimated at around 140 euros per capita2 on average. In general, there was also a recovery of flows from the other BRIC countries: Brazil (+19.6% in arrivals and +22.8% in presences), the Russian market (+31.7% and +24.4% respectively), which is important for the tourism economy in the broad sense if we consider that their average daily expenditure is among the highest, no matter the reason for their trip; India (+10.1% and +5.6%). A comparison between the ranking of the foreign tourist countries of origin in the year 2000 and that of the year just ended highlights some emerging markets: Romania (which rose from 31st to 18th place), South Korea (from 34th to 20th), Ireland (from 28th to 16th), Russia (from 23rd to 12th) and India (34th in 2005
and now 27th). constantly renewing demand. The traditional offer is accompanied by historical villages and walled cities, the option of Veneto villas, places rich in natural and scenic heritage,as well as an offer that provides[2] the opportunity to practice sports such as golf, horse riding, cycling, not to mention that of wellness, motorcycle tourism, conference tourism, religious itineraries, fish tourism etc., all enriched by the flavours of our food and wine culture.
The excellent results achieved in 2017 by Veneto tourism reflect the growing interest of both Italian and foreign customers. Lately, among holiday destinations,the progressive and unstoppable attractiveness of the quality offer is evident, thanks to a luxury tourism that has never known crisis: the presences in the highest categories have grown from 2007 to the present with an average annual rate of close to +4%, while for 3 stars there is substantial stability, and for 1 and 2 star hotels the average annual rate is -4.4%.
However, it should be noted that in the last year the number of tourists has increased for all destinations, especially Veneto, which are closer, safer, and characterised by a timeless charm hotel categories: +5% for 5 stars, +3.1% for 4 stars, +2.3% for 3 stars, +0.7% for one-star hotels. Excellent results were also achieved by open-air facilities (+5.1%), agritourism (+8.3%), B&Bs (+8.5%) and all the other types of hotel services (+13.9%).

The search for comfort

A trend that is confirmed year after year
On average) and in cities of art (around 2 nights) and and quite stable both at the lake and in the mountains.

Veneto in Europe

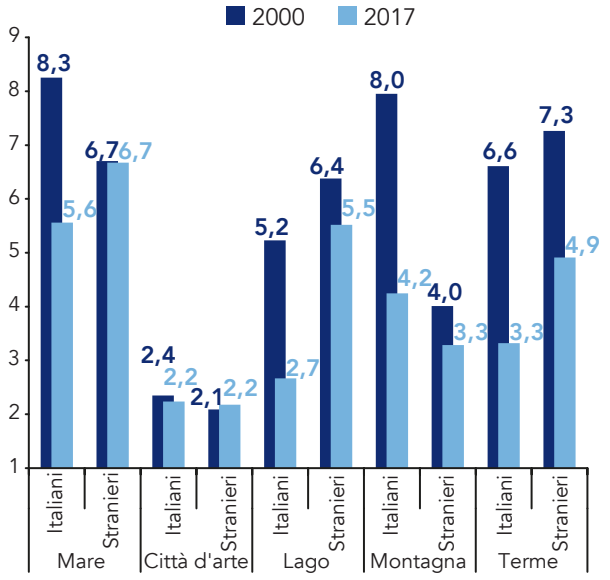
Over the last sixty years, tourism has grown so fast that it has become one of the most important industries in the world. As the World Tourism Organi-

2 Expenditure on accommodation, restaurants and bars, shopping, transport to the visited country and other services are included; expenditure on two-way trips is excluded.

sation (UNWTO) pointed out, over the years more and more destinations and countries have opened up to tourism and invested in its development, transforming modern travel into a key factor of economic progress.
In 2012, for the first time in the world the threshold of a billion arrivals by international tourists

Shorter stays, especially for Italian guests

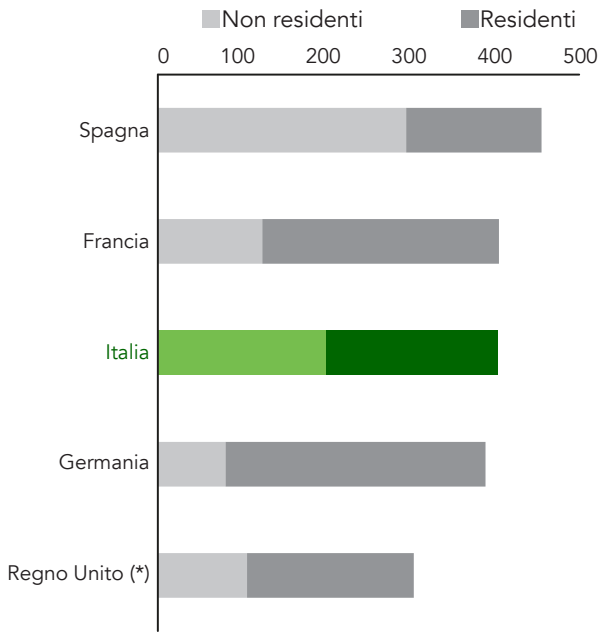
Fig. 3.4 - La permanenza media per provenienza e comprensorio turistico (*). Veneto - Anni 2000 e 2017



(*) Permanenza media = presenze / arrivi
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati provvisori Istat - Regione Veneto

was exceeded, with an estimate of 1,189 million for 2015 and 1,235 million for 2016.
Europe is confirmed as the first continent in the world to receive half of the international arrivals of the entire is the progressive and continuous reduction of stays in holiday resorts. The long summer holiday of the past has been replaced by one or more short holidays throughout the year, even in the low season.
The variation in habits is more marked in the case of Italians, who since 2000 have reduced by an average of 2-3 nights their stays at the seaside, lake and spa resorts, and have halved their stay in the mountains. On the other hand, the duration of the foreigners' holiday has remained unchanged at seaside resorts (6-7 nights planet, counting mainly on three strengths: cultural heritage, the variety of the landscape and the quality of the offer. The data used up to now are from UNWTO, the only source that allows to compare the arrivals of international tourists from and to all countries around the world. Only those who visit and spend the night in a foreign country are counted, excluding residents' stays. This is an important item for the economy, as foreign tourism brings in wealth under the form of additional spending in the region.
Eurostat data, which also records tourists visiting their own country, highlight the essential role played by the 4 most tourist-attractive nations emerges: Spain, France, Italy, Germany and the United Kingdom, which account for 64% of overnight stays of

Fig. 3.5 - Le prime 5 nazioni per numero di presenze turistiche (milioni). UE28 - Anno 2016



(*) Per il Regno Unito l'ultimo dato disponibile è relativo al 2012, anno tra l'altro non confrontabile con i precedenti
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati Eurostat

Tab. 3.4 - Positioning in the ranking for arrivals and presences. Italy and Veneto - Year 2016

	Foreign tourists		Total tourists	
	Arrivals	Presences	Arrivals	Presences
Italy among the European states	2°	2°	4°	3°
Veneto among the European regions	4°	5°	4°	7°
Veneto among the Italian regions	1°	1°	1°	1°

Source: Processing of data from Eurostat by the Statistics Office of Regione Veneto

tourists from the EU28.
There has been a rapid growth in tourist flows to Spain, which in 2011 regained second place and reached the top of the European ranking5 in 2015. Italy is in third place, a short distance from its historic competitor, France. Italy ranks second for international tourism, thanks to the considerable numbers reached in terms of both arrivals (almost 57 million) and presences (almost 200 million).ranks 4th among approximately 300 European regions, after Île de France, Catalonia and Andalusia. A comparison between European regions on the number of overnight stays, puts Veneto in 7th position, preceded mostly by Spanish and Croatian seaside regions, characterised by longer average stays. In Veneto, stays are shorter due to the versatility of the offer: thanks to the morphology of the region, skilfully enhanced, alongside the holiday by the sea, Veneto proposes stays in the Dolomites, which are a UNESCO World Heritage Site, and also at renowned and beneficial spa resorts, Lake Garda, cities of art famous all over the world, etc. In 2017, 54.4% of tourists who came to Veneto chose as their destination a city of art, staying only 2.2 nights, while the longer stays were recorded in the seaside resorts (6.3 nights) for 21.5% of tourists.

3.1 The variety of the offer: the five traditional and time-less offers

Veneto is the 4th region in Europe for total number of tourists

Tourism destinations in Veneto attract more and more tourists, so much so that in In 2016, as far as tourist arrivals are concerned, Veneto beat its own historical record for arrivals. In 2017, the cities of art and the lake continued to record excellent performances, with increases of close to 10% and 4%, respectively. Even spas are attracting more and more tourists (+6.9% of arrivals), amounting to +2.3% of presences. However, the hot 2017 summer also increased the number of tourists at seaside resorts, which, after a standstill in 2016, resume growth in number (+6.4%) and overnight stays (+5.5%).
The mountains show an increase in the number of tourists and at the same time a decrease in presences due to the reduction in the length of stay; however, for the hotel sector there was +6.2% of arrivals and +3.1% of presences, mainly thanks to a snowy December.

Everyone at the seaside

Tab. 3.5 - Ranking of European regions by tourist presence - Year 2016

	Presence (milion)	Arrival (milion)	Average stay (nights)	% Var 2016/15	
				Presence	Arrival
1° Canarie	102.7	13.4	7.7	9.2	9.1
2° Catalogna	79.8	24.0	3.3	5.7	7.9
3° Croazia adriatica	74.2	13.5	5.5	8.9	8.9
4° Île de France	71.2	34.1	2.1	-7.3	-4.4
5° Baleari	69.9	11.6	6.0	7.2	12.0
6° Andalusia	66.2	21.3	3.1	7.8	7.8
7° Veneto	65.4	17.9	3.7	3.4	3.5
…					
10° Trentino A.A.	48.2	11.0	4.4	6.0	7.4

Source: Processing of data from Eurostat by the Statistics Office of Eurostat

Seaside resorts, with 4.1 million arrivals, welcome 21.5% of tourists who choose Veneto as their holiday destination, totalling 37.4% of regional presences (25.8 million overnight stays).
While the number of tourists attracted to Veneto seaside resorts has fluctuated in recent years, the attractiveness of 2017 has shown strong growth.

Tab. 3.1.1 - Tourist movement by district. Veneto - Year 2017

	2017 (milioni)		% share of the regional total		% var. 2017/16		% var. 2017/16 hotel industry	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Seaside	4.1	25.8	21.5	37.4	6.4	5.5	4.9	3.5
Cities of art	10.4	22.9	54.4	33.1	9.3	9.7	5.0	3.3
Lake	2.7	13.0	14.2	18.8	3.6	3.9	0.4	-0.4
Mountains	1.1	4.3	5.7	6.2	3.6	-3.2	6.2	3.1
Spas	0.8	3.2	4.3	4.6	6.9	2.3	6.7	2.1
Total	**19.2**	**69.2**	**100.0**	**100.0**	**7.4**	**5.8**	**4.6**	**2.7**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Beach holidays broke their all-time record in terms of higher arrivals, for the first time higher than 4 million thanks to a + 6.4% - whereas presences did not exceed the 2011 peak, despite an increase of 5.5% last year.
These results are mainly linked to the strong and ever increasing attractiveness of the region for foreigners, who make up 64.5% of the customers at Veneto seaside resorts.
More specifically, Germany is not just the most important foreign country for the seaside destination - about a quarter of the tourists come from here, who choose this destination to spend an average of more than 8 nights - but also the one that has contributed most to the growth of the sector in recent years.
As shown in the following graphs, which identify the markets for each type of destination that have most contributed to the 2017 result (in a positive or negative sense), the contribution of Austria, the second most important foreign country, and that of the Czech Republic were also decisive for seaside destinations.
The interest of Italians was also significant (with a 4.3% increase in arrivals and + 3.2% in presences). In contrast, growth in 2017 was hindered by the negative sign from the Netherlands and the United Kingdom.
French customers are starting to grow again (+4.7%), after years of continuous defections, whi-

Tab. 3.1.2 - Tourist movement at seaside resorts. Veneto - Year 2017

	2017		% share of the total area		Var.% 2017/16	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Italians	1,462,255	8,131,036	35.5	31.5	4.3	3.2
Foreigners	2,653,726	17,710,348	64.5	68.5	7.5	6.6
Total	**4,115,981**	**25,841,384**	**100.0**	**100.0**	**6.4**	**5.5**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

ch have caused France to lose third place among foreign markets, occupied until 2011, falling to the current 6th place.

Unique cities of art in the world

Absolute record for cities of art, on all fronts of arrivals and presences of Italians and foreigners. In 2017, the accommodation facilities welcomed more than 10 million tourists,+36% compared to 2007.
Such positive results have been achieved thanks to our fellow countrymen, who stand out in first place as fans of cultural destinations (about a third of overnight tourists) and who recorded a + 7.3% of arrivals and + 7.6% of presences.
Americans represent the main foreign country of origin (850 thousand arrivals) as they continue to show increasing interest in direct travel to Veneto cities (+11.7%). The second place in terms of arrivals has been held by China for years, whose contribution has been instrumental for the 2017 result thanks to a + 19.4% of arrivals and + 20% presences. The importance of this market is also underlined by the high expenditure of Chinese tourists at their destination places: they are the tourists who appreciate luxury most, with an average daily expenditure of around 200 euros3, as well as tourists from Saudi Arabia, Dubai, Hong Kong and Japan, as demonstrated by their choice of accommodation (83% of cases in 4-5 star hotels), which is accompanied by a passion for purchases dedicated to about a quarter of their budget.
The other markets that have made a key contribution to the numbers achieved in 2017 are Germany (+15.2% of arrivals), Russia (+35.8%) and France (+8.5%); however, it should be noted that in this sector all origins have contributed to the growth positively, with the minimum contribution being zero.

Sport and relaxation at Lake Garda

The lakes also broke their historical record both in terms of arrivals (2.7 million, +3.6%) and presences (13 million, +3.9%), thanks above all toalmost 23 million overnight stays, with a staggering increase: respectively +9.3% and +9.7% compared to the previous year, +47.3% and the strong increases in foreigners (around 4%), but also Italians (+1.8% of arrivals and +3.8% of presences).
The Germans, who make up about 40% of the clientele and are the most[3] loyal to Lake Garda, even more than the Italians, have provided the greatest boost to growth in 2017 thanks to an increase of 5.7% in arrivals and 6.9% in presences. The Austrians have also shown a growing interest in this type of offer, while Belgians, French and Dutch have slowed down the growth of the sector for a number of arrivals that was lower than the peak recorded in 2016.

The Dolomites and more

Veneto mountain resorts are represented by the Dolomites, which in addition to being a UNESCO World Heritage Site since 2009, also offer many other things: beautiful peaks, crystal clear air, unspoilt nature, pretty villages dotted around the romantic valleys.
They continue to attract a growing number of tourists, more than a million arrivals: in 2017 the number of Italians grew (+1.7%), making up the main market (65.5% of arrivals) and the number of foreigners grew (+4.1%).
However, analysing the trend of overnight stays, it is evident that the growth in foreigner numbers (+4.1%) has not completely compensated for the reduction in the number of Italian nationals (-5.9%), producing an overall -3.2%.

3 Includes accommodation, restaurants and bars, shopping and transport in the visited country and other services, excluding two-way travel costs.

Tab. 3.1.3 – Tourist movement in cities of art. Veneto - Year 2017

	2017		% share of the total area		% var. 2017/16	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Italians	3,232,999	7,228,635	31.0	31.6	7.3	7.6
Foreigners	7,189,153	15,666,134	69.0	68.4	10.2	10.7
Total	**10,422,152**	**22,894,769**	**100.0**	**100.0**	**9.3**	**9.7**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Tab. 3.1.4 – Tourist movement in lake areas. Veneto - Year 2017

	2017		% share of the total area		% var. 2017/16	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Italians	701,262	1,868,294	25.8	14.4	1.8	3.8
Foreigners	2,018,670	11,138,756	74.2	85.6	4.2	3.9
Total	**2,719,932**	**13,007,050**	**100.0**	**100.0**	**3.6**	**3.9**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

As already highlighted above, the reduction in presences is closely linked to the change in habits of the Italians, who replaced the long holiday of the '90s (when they stayed for an average of 8 nights) with weekends or short holidays, now staying for an average of 4.2 nights. This reduction is particularly noticeable for the Veneto people themselves, who make up around a quarter of customers.
Positive contributions to the 3.6% growth in arrivals come from the Czechs, Americans, Germans and Dutch.

Spas, popular all year round

A record number of arrivals at spas in 2017, over 800,000 (+6.9% compared to the previous year), is not accompanied by a record for presences (over 3 million), which dates back to 2001, despite an increase of +2.3%. This type of offer is appreciated mainly by Italians
(66.7%) and shows a reduction in the length of stay over time, which prevents obtaining same level of presences as in the past: from almost 8 nights in the 90s to an average of 3.9 nights nowadays. Over the years, the interest from Italians has grown in particular, who since 2004 have surpassed foreign customers and to whom the highest contribution for the growth of the sector is linked.
In this type of destination, the attractiveness for people from Veneto is also assuming a certain importance; their number has more than doubled since 2007 (+8.9% of arrivals and +3.6% of presences last year).
After the national market, there are the German market (+4% of arrivals) and the Austrian one (+2%); however, as shown in the figure, the greatest contributions to the growth of arrivals are attributable to new countries of origin, primarily China, India and Russia, for which there is no expenditure estimate available yet. On the contrary, the interest of the Swiss and Belgians has declined.

3.2 A trip to Veneto that goes beyond the norms

Institutions are more and more engaged, both at a national and local level, in increasing the contribution that tourism makes to local economies, society and sustainable well-being, through creative pro-

Tab. 3.1.5 – Tourist movement in mountain areas. Veneto - Year 2017

			Quota % sul totale comprensorio		Var.% 2017/16	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Italians	713,848	3,028,420	65.5	71.1	1.7	-5.9
Foreigners	375,187	1,232,559	34.5	28.9	7.3	4.1
Total	**1,089,035**	**4,260,979**	**100.0**	**100.0**	**3.6**	**-3.2**

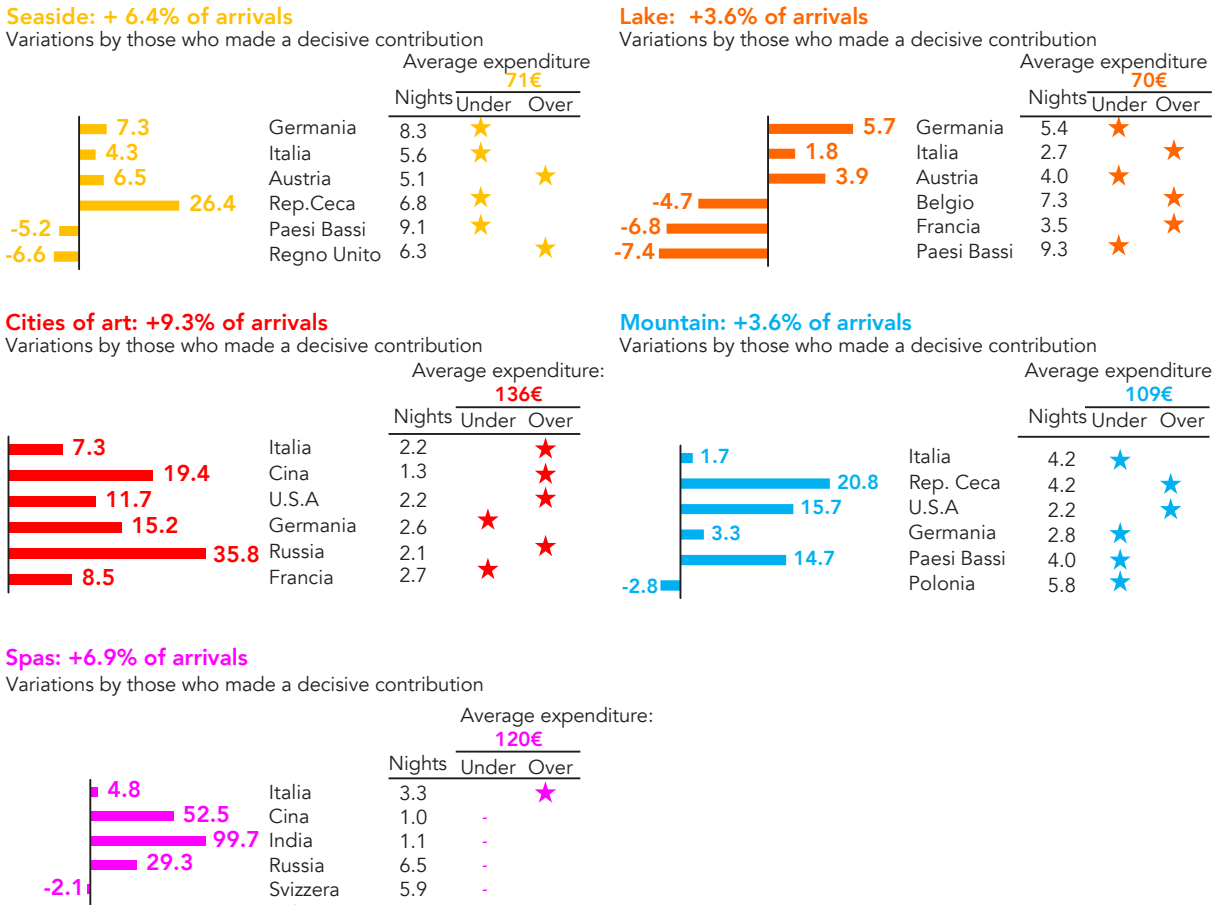
Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Tab. 3.1.6 – Tourist movement in spa areas. Veneto - Year 2017

	2017		% share of the total area		% var. 2017/16	
	Arrivals	Presences	Arrivals	Presences	Arrivals	Presences
Italians	550,252	1,827,534	66.7	57.5	4.8	0.5
Foreigners	275,224	1,352,366	33.3	42.5	11.5	4.8
Total	**825,476**	**3,179,900**	**100.0**	**100.0**	**6.9**	**2.3**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

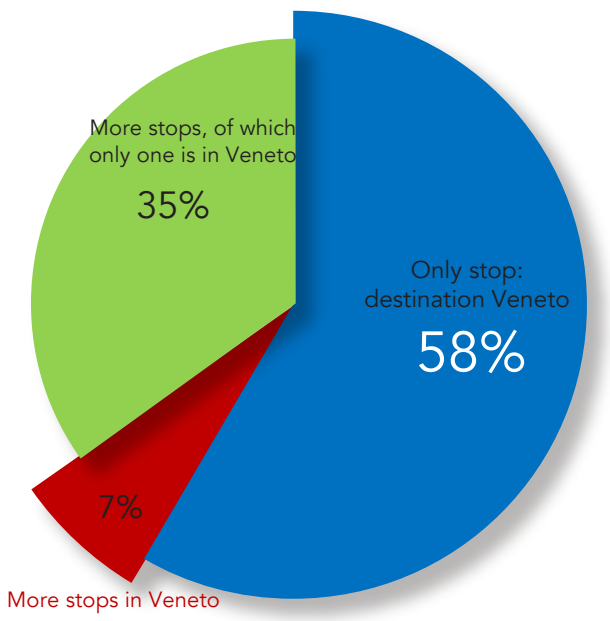
Fig. 3.1.1 - The most relevant origins for the result of each tourist area: change in % of arrivals 2017/16, average stay (nights) and level of expenditure (*)



(*) Average daily per capita expenditure 2013-2016. Includes accommodation, restaurants and bars, shopping and transport in the visited country and other services; in the case of foreigners the return travel cost is excluded
Source: Processing of Banca d'Italia, CISET and provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

posal for the promotion of new models and initiatives. In particular, one of the goals of the Strategic Tourism Plan4 is the creation of new destinations and new products of strategic value based on the integrated use of resources, regional cooperation and the quality of information. Smaller towns and mountain, natural and rural areas, including those in inland areas, offer a significant part of high value heritage with an attractiveness potential, mainly due to landscape, still to discover. The offer of mature and prevalent destinations, such as large cities of art, must be integrated[4] and connected with that of emerging areas and products, in particular through the promotion of local identities and landscape. To meet the needs of the demand, the cultural permeability of the places will be improved: historical paths, cultural routes, pathways, etc., are a prerequisite for innovation of landscape use for tourism combined with the promotion of the specificity of both the material and immaterial aspects of local culture.
Therefore, on the whole, the focus is on connecting the various sectors and to enhance the specialities of each destination to make the tourist experience even more complete and satisfying.
In this context, a question arises: how often does a foreign tourist who chooses Veneto for a trip or a holiday plan a tour with stays in different locations? And which destinations to they combine?
In the world of foreigners travelling to Veneto, single-stop trips prevail (58%). However, about 35% take a trip with more stops in Italy, with only one destination in Veneto. Finally, 7% of foreign travellers spent the night in different locations in our region, thus enjoying different cultural realities. rallies and landscaping and savouring more enogastronomic specialities. 7% of multi-stop trips to Veneto may seem an insignificant portion, but bear in mind that Veneto is the Italian region with the largest tourist flows, with almost a million arrivals by foreign tourists per year. This is the slice that could be extended, proposing tourists not only the most renowned places, but attracting them, once arrived at their destination, to the other precious and multiple destinations of which our region is dotted. Which Veneto municipalities are currently most involved in multi-stop trips? It is evident that the majority of multi-stop trips in Veneto only reach the capital municipalities (61.7%), another 29.7% involve both capital cities and other municipalities, and finally only 8.7% concern smaller municipalities. About half of these trips are included in tours that also include other Italian destinations.
The journeys of foreigners that foresee more stops in Veneto, highlight a strong link between two of the best known destinations in the world: Venice and Verona. In fact, 36.4% plan to combine Venice and Verona as exclusive stops or as part of a larger journey.
However, we want to go further and, by observing a still limited number of cases, look for seeds that could germinate in the future. In order to identify some of the elements that characterise trips to Veneto, a correspondence analysis5 has been carried out, which summarises a composite reality by identifying different types of tourists.
The information used to outline those enjoying Ve-

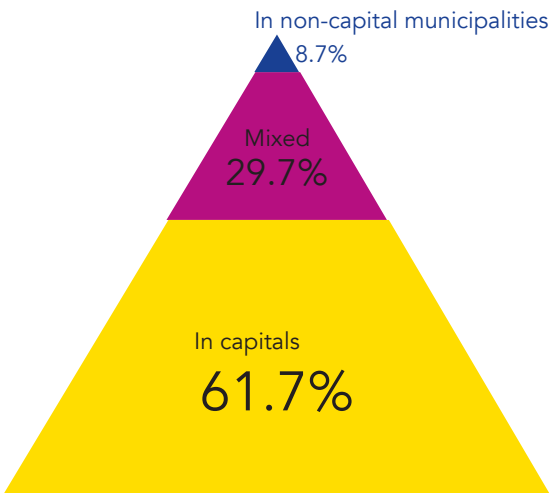
Fig. 3.2.1 - The trip of foreigners arriving in Veneto. Years 2012-2016



Source: Processing of data from the Banca d'Italia by the Statistics Office of Regione Veneto

4 The Strategic Tourism Plan "PST 2017-2022 - Italy, a country for travellers", prepared by the Standing Committee for the Promotion of Tourism, with the coordination of the General Directorate for Tourism of MiBACT and the support of a mixed Technical Group, aims to provide a unified vision of tourism and culture in Italy, placing the tourism sector at the centre of the country's development policies

Fig. 3.2.2 - Multi-stop trips to Veneto per type of municipalities chosen for overnight stays. Years 2012-2016

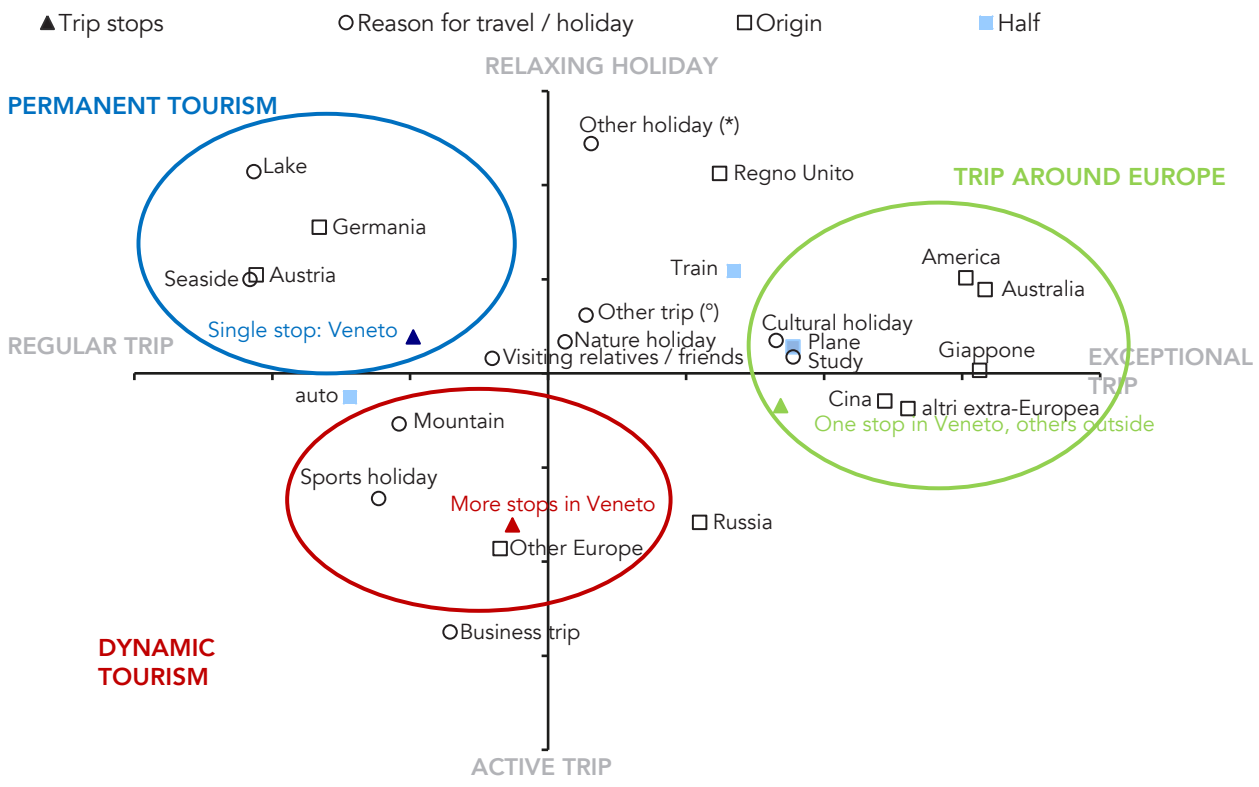


Source: Processing of data from the Bank of Italy by the Statistics Office of Regione Veneto

neto as a destination is: the origin of the guest, the type of trip (defined according to the reason for the stay), the distinction between trips with a single destination or with several stops, the means of transport used in the return trip.
As shown in the following graph, the various characteristics are distributed in a point cloud centred on the origin of the axes. The juxtaposition of the points that are far from their origin and statistically most significant, allows us to interpret the axes as follows: the horizontal axis is the most relevant and indicates the repeatability of the trip, from the most common and frequent - typical[5] to those who have to travel a few kilometres to get to Veneto - located on the left, to the most extraordinary trips by those who are on the other side of the world and travel by plane to take a tour that involves the main European locations, located on the right. The vertical axis indicates another aspect of the journey: from the relaxing holiday at the top, to the active holiday or business trip at the bottom.
Holidays at the seaside and at the lake are classically those in which, in the hottest season, people want to relax more whilst enjoying the coastal breeze and thus staying in a single location. In this type of holiday, aimed at relaxation and repeatable as within a few hours by car, we find the Germans and Austrians. In this case the trip's destination is one only, with almost no overnight stays in other places, neither within nor outside Veneto. In general, the trips made by Germans and Austrians to Veneto are characterised by high levels of stationarity (about 80% of cases). A cultural holiday is characterised, however, by the high association with stops outside Veneto: typical of those who have come here from the other side of the world (East, America, Australia), and want to see the most famous Italian and European cities with their own eyes.
Those who show a greater tendency to stay in different places in Veneto are foreigners who choose a sporting or mountain holiday: in these cases, those who spend the night in different places are still the exception, but the percentage rises to 11-13%. Even those who want to taste the food and wine products of Veneto, so much so as to indicate this as the main reason for their trips, more frequently choose a multi-stop trip (about 13% of cases) In this context, it is clear that the proposal to undertake an "alternative" trip with respect to the usual destinations should be aimed primarily at traditional markets, in addition to holidays at seaside or lake resorts during high season, proposing trips that allow you to enjoy the landscapes at each stop and enjoy the culinary and cultural specialities of so-called "minor" destinations, which are truly valuable for their uniqueness. Attention should be drawn to the thrill of experimenting with new experiences, taking in the customs and identity of a region first hand and bringing home the memory, perhaps following paths to be taken in low or medium season on foot, by bicycle, on horseback, enjoying the landscape. We must not forget the experiential component of food, which directly conveys the culture of a place

5 Correspondence analysis is a multivariate statistical analysis that makes it possible to switch multiple information to a simpler structure, highlighting the dependencies that exist between them. The results can be represented on a Cartesian plane whose axes are non-observable factors. The information from the Bank of Italy's border survey, collected when the foreign traveller is leaving our country, is used. In order to identify the main types of tourists, the data collected over several years of investigation on foreigners who visited Veneto from 2012 to 2016, have been considered. Foreigners who were only in transit were excluded, i.e., those who were only passing through to move from one foreign country to another, as well as cruise passengers.

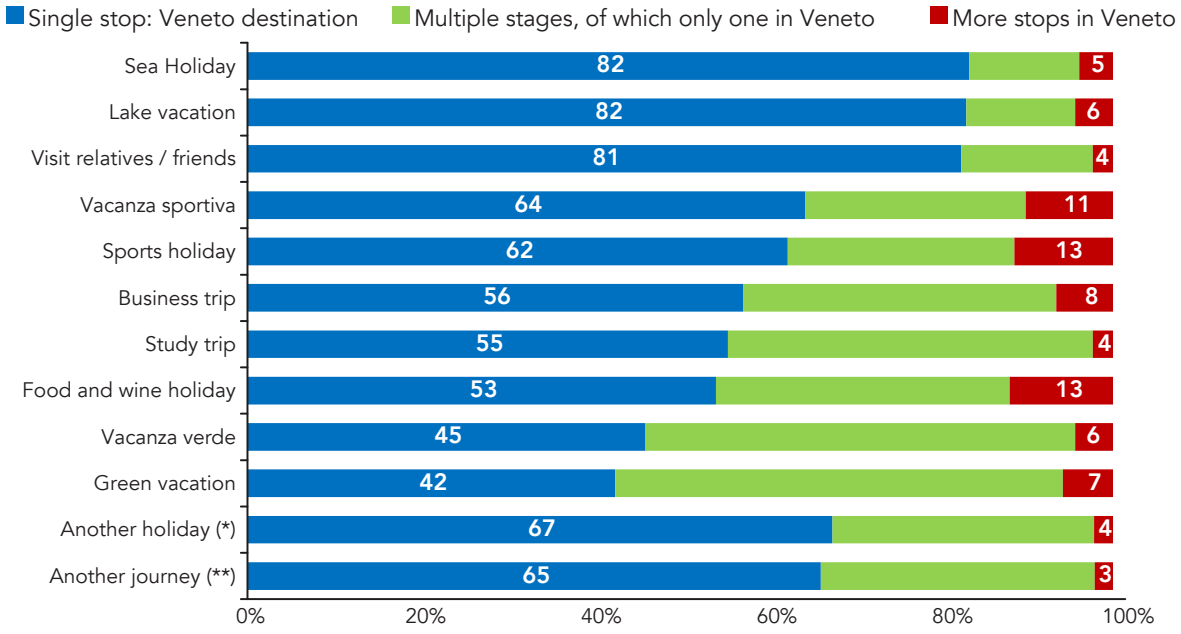
Fig. 3.2.3 - The trips who foreigners who arrive in Veneto by type and stops. Years 2012-2016



(*) "Other holiday" includes: holiday for cultural or sporting events and food and wine holidays.
(°) "Other trips" include: honeymoons, shopping, care, religious and other personal reasons. Source: Processing of data from the Bank of Italy by the Statistics Office of Regione Veneto

and the story of those who have lived there over time. Food and wine tourism is becoming increasingly popular and is attracting the attention and curiosity of Italians as well, in search of new cuisine and food and wine traditions.
Veneto villas, local specialities One of the many proposals that can entice tourists to fully enjoy the Veneto culture is offered by villas, increasingly open to the public - going from 742 in 2013 to 857 in 2018 - allowing, in some cases, a dream stay.
The Veneto villas offer new destinations at the highest level of attraction, able to increase a "slow tourism" that enhances the region, to the discovery of the artistic, architectural and landscape excellences and the cultural heritage of those areas that cannot be included in the traditional tourism offer. In this way, they also represent a strong point for the delocalisation and seasonal adjustment of tourist flows.
It is a unique and inimitable phenomenon, made even bigger and more famous by Andrea Palladio10, and testifies to the progress of the long peace brought by the Serenissima Republic: in a region where safety was guaranteed with excellent land and river connections, these villas were centres of economic development for agriculture, craftsmanship, culture and civilization. They were born as places of work, as drivers for the local economy, as places of social aggregation, transit and trade. Officially catalogued villas are 3,970, built by the nobility and wealthy families of Veneto; these buildings and architectural complexes are scattered everywhere. 98% of Veneto municipalities are home to at least one villa; the greater concentrations are in the provinces of Vicenza, Treviso, Verona and Padua, particularly along the Brenta river, on the road

Fig. 3.2.4 - The trips of foreigners who arrive in Veneto by reason and stops. Years 2012-2016



(*) "Other holiday" includes: holiday for cultural or sporting events.
(°) "Other trips" include: honeymoons, shopping, care, religious and other personal reasons. Source: Processing of data from the Bank of Italy by the Statistics Office of Regione Veneto

from Venice to Treviso, in the Pedemontana hills, in the Euganean Hills and Berici Mountains and in the plains of lower Veneto. The structure and external aspect of thesehistorical buildings is extremely varied, also due to their original use: monumental buildings such as Villa Pisani in Stra, or jewels of Palladian architecture such as the Rotonda in Vicenza or Villa Piovene in Lugo di Vicenza; others have been genuine noble farms such as Villa Papadopoli in Maserada; or the functional Villa as a centre of development for the local community, for example Villa Contarini in Piazzola sul Brenta.

Regione Veneto has decided to enhance this great heritage by putting it to the attention of international tourism as a well-defined "cultural product", thus offering the villas an opportunity to recover an active role in tourism, a sector which is a real industry and which creates wealth by enhancing the region. To perform this service, the owners of villas who subscribed the Charter of Services adopted by Regione Veneto, undertake to maintain a certain level of quality over time of tourist services offered on the basis of defined standards. They offer, with specific times and methods, the opportunity to visit the interior and/or parks, to stay there or to refresh with the agri-food products and wines of the region. To date, 172 villas have joined the Charter of Services and have been consequently included in the circuit of regional tourism promotion; 66 of them also offer accommodation, thus being part of the vast world of accommodation facilities in Veneto, hosting about 200,000 guests in 2017. The largest number of guests who had the privilege of staying in this particular niche-offer facilities in 2017 is found in the province of Treviso (57.4%), followed by Verona and Venice (19.2% and 12.5% respectively). The average length of stay is 1.9 nights. Veneto villas are preferred mainly by foreigners (62.6% of arrivals), as a place to live within a completely different history. That which is appreciated is entering a magical world and enjoying all aspects of aesthetics, gastronomy, culture, etc. Villas are also one of the fundamental proposals in the field of hospitality for couples who choose Veneto for their dream

wedding by staying in exclusive environments.

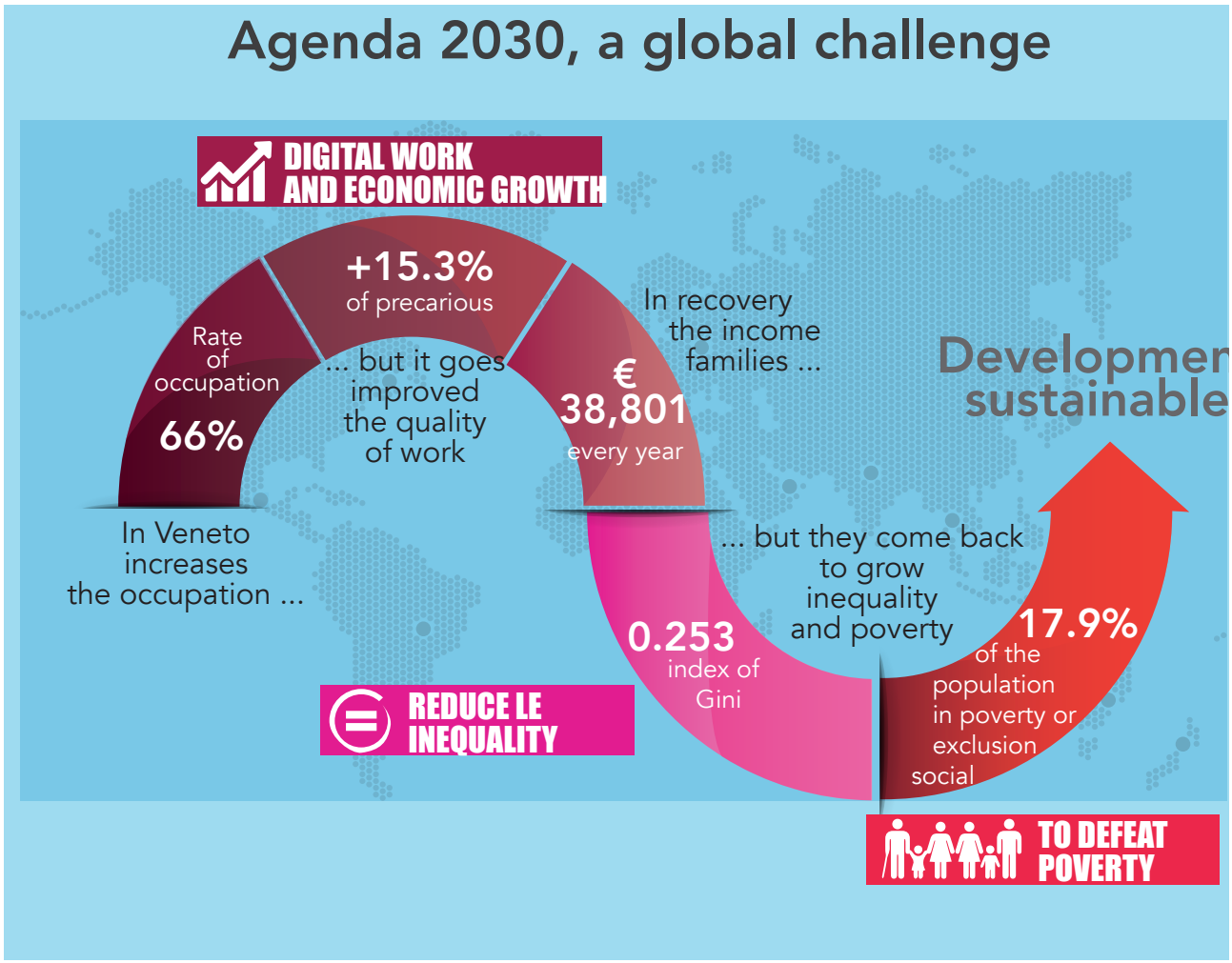
Tab. 3.2. - Total of villas that open to visits, subscribers of the Charter of Services, hospitality facilities. Veneto - Year 2018

Provincia	Total villas		Villas subscribers of the Charter of Services as of	
	Villas	of which open to visits (*)	Villas (**)	of which with hospitality
Belluno	196	53	13	3
Padova	639	141	34	11
Rovigo	249	32	4	1
Treviso	787	107	32	17
Venezia	574	112	23	13
Verona	680	118	30	11
Vicenza	845	294	36	10
Veneto	**3.970**	**857**	**172**	**66**

(*) Visits at certain times, by appointment, etc.
(**) Includes villas, places of culture, villas that open grounds and gardens to the public, accommodation facility villas
Source: Processing of data from Istituto Regionale Ville Venete and Regione Veneto by the Statistics Office of Regione Veneto

Chap. 4 – SUSTAINABLE DEVELOPMENT AND SOCIAL INCLUSION, QUALITY WORK REQUIRED

The 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015, through the definition of 17 goals, outlines a global action plan for the well-being of people, the protection of the environment and the prosperity of countries. The challenge is open to all nations and the scope of the goals involves all components of society. In the goals' progress ranking defined by the Agenda, Italy has not achieved exciting results, ranking 30th among the 157 countries in the world and 17th among the OECD countries.
The recent economic recovery bodes well, albeit with caution. Households' income and expenditure are rising and employment levels are returning, however, not everyone is benefiting from this. This positive data is offset by the increase in inequalities and poverty, while in recent years a trend has emerged towards greater equity.
Income increases mainly for those who are already doing well or very well economically, while it decreases for the poorest 40% of the population. Moreover, the information on poverty published in recent years has long documented a paradoxical situation: unemployment is a certain cause of impoverishment; however, it is not enough to have a job to be safe from poverty. It is therefore not just a question of creating jobs, but also of developing quality jobs



SUSTAINABLE DEVELOPMENT AND SOCIAL INCLUSION, QUALITY WORK REQUIRED

4

The 2030 Agenda for Sustainable Development adopted by the United Nations in 2015[1] outlines a global action plan for the well-being of people, the protection of the environment and the prosperity of countries. The challenge concerns all nations, without any distinction between developed, emerging and developing ones, although obviously the issues are different and require different actions.
The goals established involve all components of society, from businesses to the public sector, from universities and research centres to operators of information and culture, from civil society to the individual citizen.
According to the "SDG Index and Dashboards Report[2]", prepared by the Bertelsmann Foundation and the Sustainable Development Solutions Network, Italy ranks 30th out of 157 countries in the world and 17th among OECD countries for the level of its progress towards achievement of the sustainable development goals progress defined by the Agenda.
Among the best results are those achieved by some European countries: the world ranking is led by Northern Europe, in the order of Sweden, Denmark, Finland and Norway, while Germany and France are in the top ten positions (sixth and tenth respectively).
Japan is the first non-European country (11th), then comes Canada (17th) shortly after, while the United States is only 42nd.

Sustainable development: Italy could do better!

Italy is not among the top European countries,
surpassed by countries such as Estonia (15th), Spain (25th) and Portugal (28th).
In the global context, "No poverty", "Good health and well-being", "Quality education", "Clean water and sanitation" and "Sustainable cities and communities" are the goals for which Italy has the highest scores; however, the most critical issues concern some environmental objectives, such as "Life below water" and "Responsible production and consumption", but also the delays in "Industry, innovation and infrastructure" and "Peace, justice and strong institutions".

1 UN - General Assembly, Resolution of 25 September 2015

2 Bertelsmann Stiftung e Sustainable Development Solutions Network, "Global Responsibilities. International spillovers in achieving the goals - SDG Index and Dashboards "

The recent economic recovery in our country bodes well for the performance recovery of the objective "Decent work and economic growth", hitherto penalised by the persistent crisis, without prejudice to the need to ensure development "truly for all", so as not to increase
inequalities.

4.1 Working: protection against social exclusion is not always guaranteed

The economic crisis that has characterised the last decade in particular has had a profound impact on the living conditions of thousands of people. However, this is not just about the loss of work and unemployment: in recent years Italy has also experienced an increase in poverty associated with an increase in employment. Work increases but poverty does not decrease, why? While creating jobs is certainly essential, developing "quality work" is also essential.
Over-qualified workers[3], involuntary part-time work, increasing numbers of fixed-term contracts, late entry of young people into the world of labour and low wages are some of the factors that increase the likelihood of being below the relative poverty line and, in turn, the risk of families offering fewer opportunities for their children's future.
In this scenario, let's have a look at the economic situation in Veneto, also comparing it with the rest of the country, from participation in the labour market to the quality of employment, closely linked to the risk of poverty or social exclusion of the person and their well-being. This chapter will deal mainly with the labour participation of the population as a whole; the next chapter will analyse in detail on young people and their opportunities.

A recovery in the economy: employment is on the rise and unemployment is falling...

According to updated data from the Labour Force Survey by ISTAT, in 2017 the labour market showed new positive signs. For the fourth consecutive year, employment in Italy has risen and unemployment has continued to fall: more than 23 million people are employed and about 2.9 million are seeking a

3 Over-qualified are those workers who hold a higher educational qualification than that required to carry out a specific profession.

job, which means respectively 1.2% more and 3.5% less than last year. As a result, in the space of a year, the Italian employment rate of 15-64 year olds has risen from 57.2% to 58% and the unemployment rate has fallen to 11.2% compared to 11.7%.

In 2017, employment in Veneto was still growing significantly and unemployment continued to fall: in one year, employment increased by 2.1% and the unemployed decreased by 5%. There are 2,125,690 employed Veneto people, representing a rate for 15-64 year-olds of 66% compared to 64.7% in 2016, while 143,610 people are looking for work, with an unemployment rate of 6.3% compared to 6.8% the year before.

In 2017 in Veneto, employment continued to rise and unemployment to fall

In line with the national figure, compared to last year, in 2017 Veneto employment increased more for women, +3.3% against 1.3% of men, recording a rate of 57.1%, two percentage points above the value of the previous year. While unemployment fell more sharply in the male component, falling by 8.6% compared to -1.6% for women.

Once again, Veneto is confirmed as one of the leading regions in Italy: it has the fifth highest employment rate for 20-64 year olds among the Italian regions and the second lowest overall unemployment rate and young people unemployment rate (Trentino Alto Adige is the only region in front of Veneto).

Veneto is confirmed as one of the leading regions

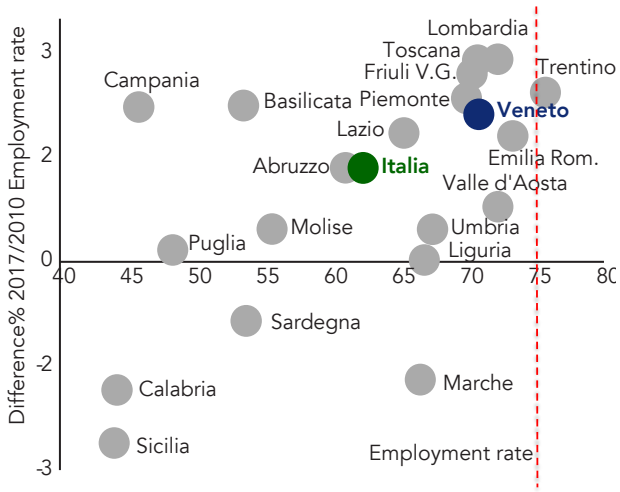
In detail, with an employment rate of 70.8% in 2017, Veneto was increasingly closer to the European target of 75% set for 2020 by the Europe 2020 Strategy and has been exceeding the Italian government's lower target of 67%[4]for years.

To date, the only region that has already exceeded the target is Trentino Alto Adige, Emilia the year in which the Europe 2020 Strategy was launched by the European Commission as a result of the Lisbon Strategy, this employment rate in Veneto rose by 2.1 percentage points; the highest increase in this period was recorded by Lombardy and Tuscany, equal to almost three points.

Once again, the worst situation is found in the South, where some regions, in addition to reporting an employment rate up to 50% lower, have also seen it decreasing over these seven years.

Particularly Romagna, Valle d'Aosta and Lombardy are approaching it, while the national average is 62.3%. Compared to 2010, Veneto: a dynamic labour market important is that the fall in unemployment is accompanied by a sharp fall in the number of inactive 15-64-year-olds, i.e., those who are neither employed nor unemployed, for both sexes. In 2017 there was 4% less inactive people in Veneto than the previous year (in Italy -1.8%), with the most marked decrease for women, equal

Fig. 4.1.1 - Employment rate of 20-64 year olds: 2017 value and 2017/2010 percentage difference by region (*)



(*) Employment rate = (Employment / Reference population) x 100

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

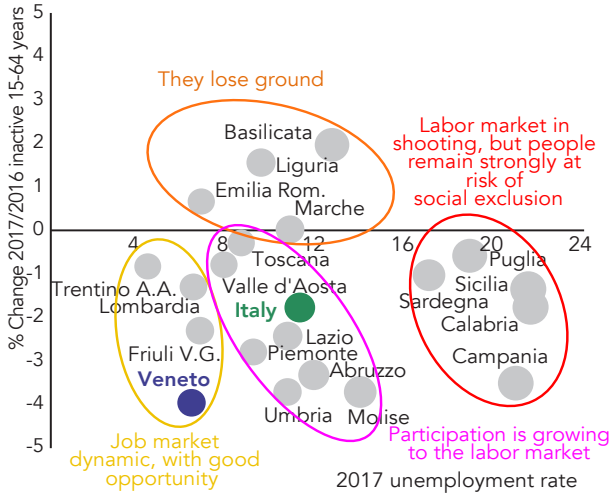
Veneto: a dynamic labour market

4 The Europe 2020 Strategy is a ten-year strategy proposed by the European Commission in 2010. It is based on a vision of smart, sustainable and inclusive growth and identifies priorities and goals to be achieved. As regards employment, the Commission has set an ambitious target: to reach 75% of the population aged 20-64 by 2020. Given the complex situation of the national labour market, the Italian government has set a more realistic target for Italy of between 67% and 69%.

to -5.3%, and -1.5% for men.
Figure 4.1.2 aims to highlight the labour market participation of 15-64 year olds in the various Italian regions, based on the changes occurred over the past year in terms of unemployment, inactivity and even employment, although the latter indicator is not present on the graph.
As the graph shows, Veneto, together with Trentino Alto Adige, Lombardia and Friuli Venezia Giulia, is characterised by lower levels of unemployment compared to the other regions and by a decrease in inactive people; in addition to that, in these regions there was an increase in the relative employment rate and a decrease in unemployment between 2016 and 2017; it is worth pointing out that Veneto has recorded the largest reduction in inactive people this year in Italy. On the basis of these positive indicators, which show a certain movement of people in their participation in the labour market in these regions, let's assume to include them in a group called the "Dynamic labour market, with good opportunities", made up of men and women who actively participate in the labour market, achieving good results in terms of employment, and also decreasing their risk of social exclusion (it should be noted that the aforesaid regions are, in fact, among those with a lower risk of poverty or social exclusion in the regional ranking).
Piedmont, Lazio, Umbria, Abruzzo, Molise, Tuscany and Valle d'Aosta have higher unemployment rates than those of the above regions, but also a significant decrease in in inactive people and in almost all regions over the past year employment increased and people looking for work decreased.
For this group of regions, the summary label "Increasing participation in the labour market" is proposed; however, clarifications should be made: in Tuscany and Valle d'Aosta, the reduction in inactivity is good, although not as good as in the other regions of the same group, and the number of unemployed people fell significantly; in Umbria and Molise unemployment increased, but over time they have recorded a decrease in inactivity of almost 4%.
Differently, in Emilia Romagna, Liguria and Basilicata the labour market has made some steps backwards in the last year: inactive people have increased while both employment and unemployment rates have decreased (in Emilia Romagna employment has slightly increased anyway). This group also includes the Marche region, were the labour situation remained stable compared to the previous year.

Finally, we create the group "Labour market is recovering, but people remain strongly at risk of social exclusion", including most regions in the South, usually characterised by the worst employment situation; although the economy is recovering, high levels of unemployment and inactivity remain, with the latter reaching peaks of 48% in Sicily and Calabria.
In general, it can be said that participation in the labour market is growing in Italy. At the provincial level, it should be noted that three Veneto provinces are in the top ten for the lowest unemployment rate: in particular, Venice, with a figure down by more than two percentage points compared to the previous year and equal to 4.8% in 2017, recorded the

Fig. 4.1.2 - Unemployment rate for 2017 and 2017/2016 percentage change inactive 15-64 year olds by region (bubble size Inactivity Rate) (*)



(*) Unemployment rate = (Jobseekers / Labour Force) x 100 Inactivity rate of15-64 year olds = (15-64 year old people not belonging to the Labour Force / Population 15-64 year olds) x 100 Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Verona loses ground, Venice takes the lead

third lowest index among all Italian provinces;

in fifth position is Belluno with 5.1% and Treviso is ninth with 5.6%; at the same time Venice has also recorded a growth in the employment rate of 3.4 percentage points, thereby showing an index equal to 67.4% in the last year. In detail, it should be noted that between 2016 and 2017, the number of people employed in the hotel and restaurant sector increased above all in the province of Venice (+30%). The province of Venice has territorial opening and the natural attractiveness of its being the capital city, one that is unique in the world, making it a privileged destination for both Italian and foreign tourists. Its tourist offer is varied, long seaside holidays are associated with visits to cities of art. Verona, which the previous year stood out for its excellent performance, recorded an increase in unemployment in 2017 and lost ground in the provincial ranking with the lowest levels, slipping from fourth place to thirteenth.
Belluno, which has always recorded good performance in labour market participation, is recovering in unemployment this year, but is also losing some positions in the ranking of Italian provinces for the highest employment rate: with a value of 69.2%, it moves to eighth place from third.
In detail, in Vicenza the situation slows down, employment decreases and the share of the labour force seeking employment remains stable, in Padua both employment and unemployment increase, vice-versa in Rovigo both decrease.
It should be noted that Bolzano maintains the best performance of all the Italian provinces in both fields.

... but how is the quality of work?

If creating jobs is certainly a considerable and fundamental challenge, considering the years of crisis that still linger today, it is even more difficult to develop "quality work".
Working may not be enough and this is confirmed by the data on poverty that has grown in recent years, which will be discussed later in this chapter.
The compulsory choice to work fewer hours than wanted, for example, highlights a situation of inadequacy of labour as a source of income, so much so that it becomes a cause of marginality with respect to the potential availability of the worker.
For young people, the downward shift in wages, the types of "low quality" and "low intensity" work that are gradually spreading, and the delayed entry into the world of labour[5] can only increase the risk of being poor despite having a salary.
On the one hand, therefore, Veneto records the largest reduction in the number of inactive people this year in Italy and the employment and unem-

5 The working conditions of young people will be discussed in the next chapter.

Fig. 4.1.3 - Variation in % of employees on fixed-term and permanent contracts. Veneto and Italy – Years 2007:2017

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

ployment indices are such as that Veneto labour market is dynamic and offers more opportunities than most other regions; on the other hand, it is necessary to assess the quality of work.
The economy is recovering, employment is growing, but this growth only concerns employment and is mostly concentrated among precarious employees.
In Veneto, employees were +51,348 in 2017, which means 3.2% more than in 2016, and this increase was mainly due to fixed-term contracts, which rose by 15.3% compared to the previous year (about 34,000 more units), while the "fixed" employees increased by 1.3% (however, about 17,350 more units than in 2016). The trend is the same as in the rest of Italy: precarious contracts increase by 12.3%, while stable contracts increase by 0.5%. For the third consecutive year the number of people working as self-employed in Veneto has decreased: compared to 2016, they are 1.4% less (Italy -1.9%), but it should be noted that this decrease that only affects the female component, with almost -8%, while the number of men has increased by 1.4%.

Workers on the rise, but especially temporary workers...

Taking a look at the employment situation in Veneto in the last ten years, with the exception of the pre-crisis period, we see that the use of fixed-term contracts has become more and more significant; the national average presents a more variable situation.
In addition, there is information on the duration of the fixed-term contract:
the growth in precarious contracts is accompanied by an increase in those with a maximum duration of 6 months. In Veneto in 2016, almost half (48.1%) of all temporary employees had a contract lasting a maximum of 6 months, compared with 42.1% the year before and 35% ten years ago. In turn, the number of workers with longer term contracts has decreased: 24.5% of precarious workers with a period from seven months to one year, six percentage points less than a year ago and 11 percentage points less than in 2006, and 20.4% of those who know that they will work for more than one year compared to 25.6% in 2006 (the remainder state that they do not know or there is no deadline).

... and with short-term contracts, but...

Short contracts are associated with the discontinuity of contributions relevant to the future of a person, as well as a sense of permanent insecurity, both at work and consequently in life choices such as buying a house or having children; this insecurity increasingly grows as long as people continue to do the same precarious work for several years with a series of fixed-term contracts.
In this context, it is worth analysing the situation in Veneto, also in comparison with the other Italian regions, with respect to three indicators measuring the "quality of employment" aspect, referring to the stability of work and the remuneration of the Bes Report6.

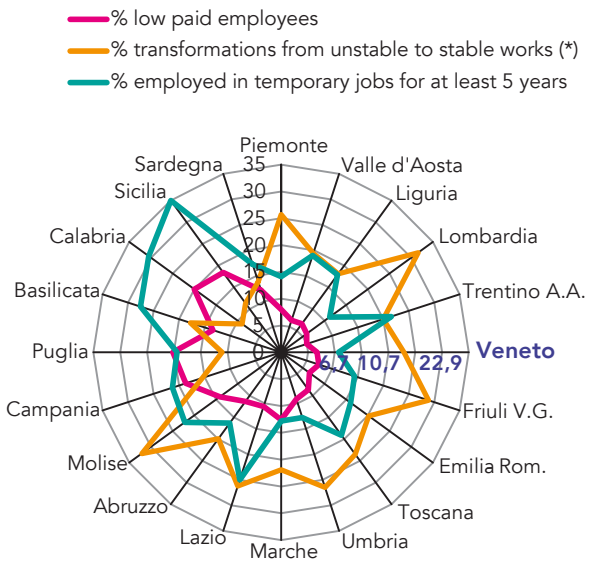
... the Veneto people have fewer ties to precariousness and low wages

Fortunately, also in this case, Veneto has shown an improvement in recent years as regards the permanence in unstable jobs and the incidence of low-paid workers. In fact, in Veneto records an increase in the percentage of transitions over the course of one year from unstable to stable jobs and a decrease in the percentage of employees trapped in precariousness for at least five years and employees with low pay.
Let's now explain the indicators considered.
The percentage of transitions over the course of one year from unstable to stable jobs is a particularly useful indicator to represent changes in the level of difficulty in stabilising fixed-term employment relationships over time, and is therefore especially important for young people. This indicator measures flows from an unstable (with an end date) position to a stable (no end date) position over the course of one year.
Since an unstable position often characterises the labour market entry phase for young people Rapporto Bes 2017: il benessere equo e sostenibile in Italia. fair and sustainable well-being in Italy. The Report offers an integrated overview of the main economic, social and environmental phenomena that characterise our country, through the analysis of a wide set of indicators divided into 12 areas including that of "Work-Life Balance" or in any case constitutes the way in which businesses employ a new worker, the indicator also highlights the possibilities of stabilising employment relationships.
The number of people employed in fixed-term work for at least 5 years is intended to highlight the phenomenon of the "precariousness trap", i.e., how many individuals continue to carry out the same work with a succession of fixed-term contracts.

It thus captures a condition of continued job insecurity.
Finally, the incidence of employees with low pay involves the concept that a limited salary is reflected in fewer opportunities and worse living conditions; this is an important indicator as research has revealed the high risk of "entrapment" in low wages and therefore risking poverty and social exclusion for people who still work.
Taking into account the regional rankings of these three indicators, in 2016 Veneto ranked first for the lowest proportion of precarious employees who had been in this position for at least five years, sixth for the lowest proportion of low-wage employees and eighth for the highest proportion of long-term employees.
In detail, 10.7% of employees have been in precarious jobs for more than five years in Veneto, compared to the national average of 18.6%, 6.7% earn an hourly wage of less than 2/3 of the median wage compared to the Italian figure of 10.2% and 22.9% are unstable employees who moved into a stable position within a year compared to 21.3% for Italy.
Once again, it is mainly the regions in the South that suffer most.
Other indicators may be used to measure the quality of work, the most important of which are those relating to over-qualified and underemployment.
Differently than at the national level, in Veneto the number of over-qualified workers, i.e., having a higher education qualification than that required to carry out their job, fell in 2017, especially for young people and mostly male.
In Veneto, 11% of employed people are over-qualified, or about 234,300 units, 1% less than 2015, a figure that has earned Veneto, over these two years, four positions in the regional ranking for the lowest amount of over-qualified employed people, taking 10th place. Italy records a higher value, equal to 12%. Once again, the labour market in Veneto shows a positive situation: in fact, Veneto, together with other regions in the North, has high employment levels, with employment rates well above the average, and low percentages of over-qualified workers. Other northern regions, such as Lombardy and Emilia Romagna, despite having good employment rates, have higher numbers of workers in professions that are not in line with their degrees. On the other hand, almost all the regions in Southern Italy are characterised by lower than average levels of employment and over-qualified worker numbers.

Over-qualified workers decrease

Fig. 4.1.4 - Some indicators of employment quality by region - Year 2016

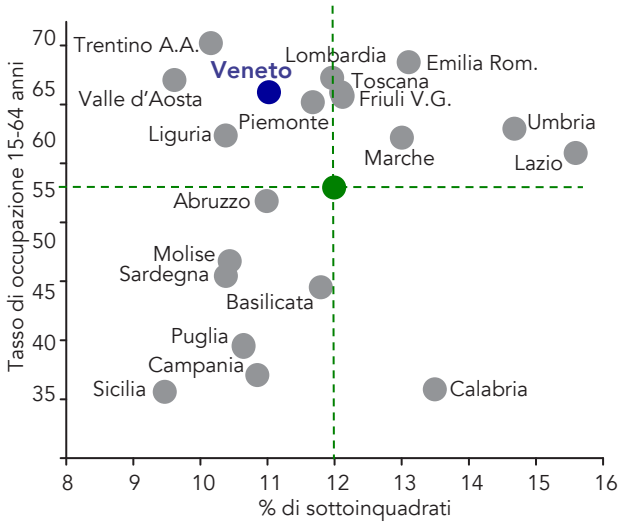


(*) Longitudinal data referring to the 4th quarter of each year. (Employees in unstable work at time t1 who have a stable job one year later/Employees in unstable work at time t1) x 100
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

The condition of being over-qualified is closely linked to certain socio-demographic characteristics of the worker. First of all, women are at a disadvantage compared to associated with the under-use of human capital is citizenship: the proportion of foreigners who cannot make use of their qualifications rises to 21.5%, however, this probably also depends on the difficulty they encounter in gaining recognition for the degree obtained in their country of origin.
Underemployed people are increasing, but the situation in Veneto is better than in other regions employment distress is underemployment. Being underemployed is defined as a worker with a part-time employment contract but who would like to work more hours and would be willing to do so within two

Women, young people and foreigners most at risk of being over-qualified

Fig. 4.1.5 - Percentage of over-qualified workers and employment rate (*). (*). Year 2017



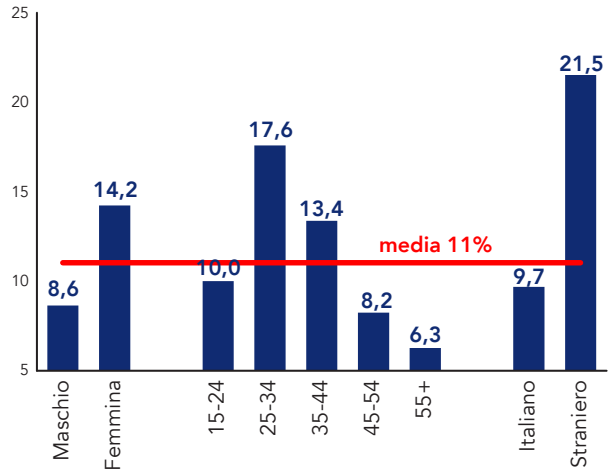
(*) Employment rate = (Employed/ reference population) x 100
3 Over-qualified are those workers who hold a higher educational qualification than that required to carry out a specific profession.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

weeks. This is a mismatch between the labour demand and supply: these employees are employed on a part-time basis, not by choice, but for external reasons, mainly due to business needs men: 14.2% of women work below their qualification compared to 8.6% of men. The differences become more significant when looking at the age group. Although there are fewer over-qualified young people, many still adapt to and accept jobs that do not correspond to their skills achieved, occupying a profession for which a lower level of education than that possessed would suffice. The percentage of over-qualified people in the 15-24 age group is low, as fewer young people have already completed their university studies. After the age of 25, the percentage of graduates increases and so does the percentage of young people forced to take up jobs that do not correspond to the qualification achieved (17.6%). From the age of 35, the proportion of over-qualified workers drops rapidly to 6.3% among workers over 55 years old 7. Finally, another personal characteristic of part-time workers alone, up on 2015 when these figures were 1.6% and 9.2% respectively. However, compared to the other Italian regions, the situation in Veneto is once again good: Veneto ranks third in the regional ranking for the lowest levels of underemployment when considering the amount of underemployed people to part time workers and fifth in that for the percentages of all employed people. Sardinia is at the other extreme in both cases, while the national average value is 3.2 underemployed people for every 100 workers and 17 for every 100 part-time workers.

Underemployed people are increasing, but the situation in Veneto is better than in other regions

If we analyse the share of underemployed people by gender compared to part-time workers alone, it emerges that 17.5 out of 100 men employed on a short time basis said they wanted to work more hours, a value that drops to 11 for women.
This in part reflects the traditional division of roles

Fig. 4.1.6 - Over-qualified employee by some characteristics (*). Veneto - Year 2017



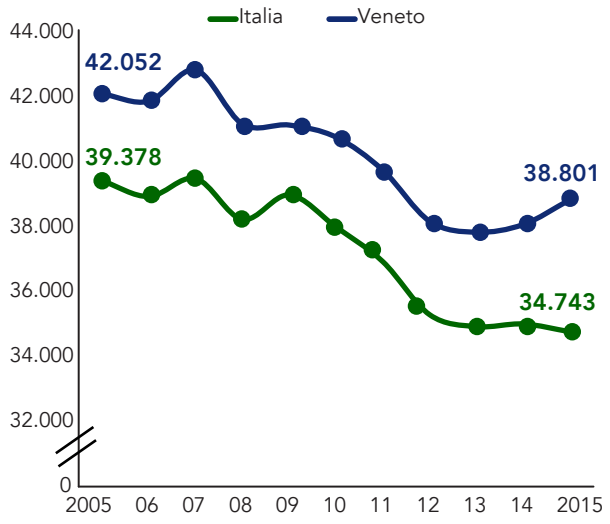
Over-qualified are those workers who hold a higher educational qualification than that required to carry out a specific profession.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

within the family: generally the woman is responsible for the care tasks and consequently part time is an organisational choice. For men, on the other hand, part time is more often involuntary, i.e. dictated by external reasons.
Age is also associated with underemployment (as we previously noted for over-qualification) and mainly affects young people up to 35 years of age, among whom the share of underemployed people rises to 19.6% of total part-time employment. In the next age group, between 35 and 44 years old, the percentage drops by six points and almost halves between 45 and 54 years old. Once again, this can be traced back to the family situation: from 35 to 44 years old, part time is more frequently a choice dictated by family needs, before it is more a constraint. Finally, foreigners are more underemployed than Italians: compared to part-time workers, there are 22.2% compared to 11%, or twice as much.
In conclusion, having a job that is adequately remunerated, reasonably secure and responsive to one's skills is a universal aspiration of people, contributing decisively to their well-being. The lack of "good employment" undoubtedly has a negative impact on the level of well-being of the person, as well as on the future of the country. The information on poverty published in recent years has long documented a paradoxical situation: unemployment is a certain cause of impoverishment, however, it is not enough to have a job to be safe from poverty. Many workers are paid low wages and are on the verge of becoming poor. It is not only a matter of Creating jobs, but is also a matter of developing quality jobs. Regione Veneto is confirmed as one of the leading regions, with employment rates well above the average and among the highest in Italy, low unemployment, less inactivity, low shares of over-qualified and underemployed. Moreover, although the economic recovery of Veneto employment is accompanied by an increase in fixed-term employment and short-term contracts, there is a decrease in temporary workers trapped in precariousness and employees with low wages and stabilisation is increasing.. The Veneto labour market is therefore a dynamic market that offers good job opportunities, where men and women actively participate and are therefore less likely, than in other regions, to find themselves in a situation of poverty or social exclusion, as confirmed by the data in the poverty or social exclusion indicator that includes our region among those at lower risk, however, there is still much to do to improve working conditions, especially in order to ensure the quality and restore to the lowest levels of poverty and social distress in the past.

4.2- The recovery of the labour market has a positive impact on the economic conditions of families.

After a negative trend lasting several years, household income in Veneto has risen to 38,801 euros per year in 2015, 2% more in real terms than in 2014. However, income is still lower than the values recorded in the pre-crisis period.
Income recovery favours the recovery of consumption, whose expenditure in 2016 was equal to 2,673 euros per month per family (+1.8% compared to 2015), more than the national average (2,524 euros). Housing, food and transport account for 64% of total expenditure; the cost of housing, which alone accounts for more than a third of the family budget and almost 50% for the most disadvantaged families, is demanding, also because it is difficult to contain.
However, the benefits are not for everyone and there is no shortage of sacrifices, even important ones: about half of the families make sacrifices, in quantity or quality, to basic foodstuffs, but also to the purchase of clothing or shoes. 32% of families save on travel and holidays and 14% even cut medical expenses "Most deprived households": households belonging to the first fifth of equivalent expenditure, i.e. the one that spends the least; "Most affluent households": households that spends the most and start from the fifth fifth of equivalent expenditure.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto (as much as 21% in Italy).
The positive data on income and consumption recovery therefore, especially for those who are already doing well or very well economically. On the contrary, the poorest 40% of the population saw their family income per capita fall by 2.8%, compared to a positive variation for the overall population (+6.1%). The percentage of the population at risk of poverty is also increasing, i.e. it receives an income below the relative poverty threshold, are contrasted with the increase in income inequalities, when in recent years, on the other hand, there have been signs of a trend towards greater equity. The Gini index, which varies between 0 and 1, where 0 indicates a condition of perfect equity and 1 of maximum

Fig. 4.2.1 - Average annual net income, including accrued rents, of households (in 2015 value euros). Veneto and Italy – Years 2005 : 2015 (*)



(*) In order to compare the economic conditions of the tenant and owner households correctly , the income inclusive of accrued rents is considered, i.e. inclusive of the notional income of the owner-occupied dwellings, estimated through appropriate econometric models.
Furthermore, income at the same value as in 2015 is taken into account, i.e. past incomes have been converted as if they had the same purchasing power as income in 2015, the last year available for income.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Tab. 4.2.1 – Percentage of certain categories in total household expenditure (*). Veneto - Year 2016

	Households		
	total	Most deprived	Most affluent
food	16.2	19.3	12.6
Housing	36.0	48.5	31.1
Transportation	12.0	6.4	16.7
Shows and culture	5.6	3.1	6.6
Hospitality and catering services	5.5	2.9	6.9
Health services	4.8	3.6	4.4
Clothing and footwear	4.2	3.6	4.5
Furniture and household	4.2	1.9	5.6

(*) "Most disadvantaged families": families belonging to the 1st fifth of equivalent expenditure, or that which they spend less; "Most well-off families": families that spend more and belong to the 5th fifth of equivalent expenditure.
Source: Elaborations by the Statistics Office of the Veneto Region on Istat data

inequality, assumed a value of 0.253 in 2015 while it had fallen to 0.237 the year before (0.303 in 2015 and 0.295 in 2014 in Italy).

The recovery is not for everyone

It also means that 20% of the wealthiest families have a total income of 4.3 times that of 20% of the poorest families, while the previous year was 3.8 times. Income increases, which reached 12% in 2016. However, in the national comparison, the economic conditions in Veneto are better: families earn and spend more and there is greater equity.
The increase in inequalities indicates that, for the time being, the implementation of a sustainable development strategy is no longer needed. Agenda 2030 insists on the urgency of reducing inequalities and calls on countries to make greater efforts to "progressively support the income growth of 40% of the population in the lower social stratum at a rate above the national average" according to the number of household members and the resources available to the household to meet basic needs, up to a share of €534 for families with 5 or more members[6].
The REI is not a welfare measure, but a " passive " economic benefit. The recipient family unit is requi-

6 For access to the REI, an ISEE threshold of 6 thousand euro is set by the legislator, accompanied by an ISRE threshold (the income component of the ISEE) of 3 thousand euro, a value of the real estate assets, other than the home of residence, not exceeding 20 thousand euro and a movable value (current accounts, deposits, etc..) not exceeding 10 thousand euro (reduced to 8 thousand for households with two components, to 6 thousand for a person alone).

Tab. 4.2.2 - Inequality indicators. Veneto and Italy - Year 2015 : 2016

	Veneto		Italy	
	2015	2016	2015	2016
Gini Index (a)	0.237	0.253	0.295	0.303
Inequality index of disposable income (b)	3.8	4.3	5.8	6.3
Rate of change in per capita household income for the poorest 40% of the population	-0.77	-2.78	-1.01	-0.89
Rate of change in family income per capita for the total population	-0.70	6.05	-0.62	2.41
Percentage of people in relative poverty	10.1	12.2	19.9	20.6

(a) The Gini index varies between 0 (equity) and 1 (maximum inequality). Years 2014 and 2015
(b) Ratio between the total equivalent income held by the richest 20% of the population and the income of the poorest 20%.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

red to make a commitment to take action, on the basis of a customised project, shared with the regional services, which accompanies the unit towards autonomy and liberation from poverty. On the basis of a multidimensional assessment of needs, the customised project defines general objectives, but also concrete expected results, it identifies the necessary support, clarifies the commitments that the unit makes themselves and that condition the supply of the benefit. The commitment of the individual and the family is required, while from the point of view of services, the ability to coordinate and network in the region, between training agencies, services for housing policies and health services,

Inclusion income, shared commitment

is essential. to be able to plan unitarily and work effectively on the different dimensions of welfare of the beneficiaries. In the start-up phase of the REI, priority will be given to families with minors, severely disabled people, pregnant women or unemployed people of 55 years of age or older, to become a fully universal measure from July 2018, of course without prejudice to the income requirements and the active commitment of the family to a path of economic and social reintegration.
The REI is allocated about 1 billion and 750 million euros in 2018, growing to 2.2 billion euros in 2019, resources are however limited and insufficient compared to the real need. Italy also has a tool to guarantee a minimum income to the poor, as already exists, in different forms, in all EU member states28.
The REI is an economic support accompanied by personalised services for work and social inclusion. Economic support varies The chapter below refers to relative poverty. according to the estimate Istat was over 4.7 million, of which about 1 million and 300 thousand were children

Defeating poverty for sustainable development

Poverty is the most extreme effect of income inequality. It is a prerequisite for many other limitations and inequalities in terms of opportunities, growth and access to basic services, such as adequate care, quality education and decent work.
Poverty tends to be persistent and passed on from one generation to the next, as children growing up in poverty are more likely to remain poor even as adults.
For this reason, " defeating poverty" is the first objective set by Agenda 2030, the basis of sustainable development; among the commitments, it envisages "By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions". The definition refers not only to monetary poverty, but to any form of poverty.
As already seen, the state of poverty in Italy, in a global comparison, is certainly good, but not so if we restrict the analysis to European countries only. According to the European definition10 , in Italy there are more than 18 million people at risk of poverty or social exclusion in 2016 (almost 3 million more than ten years ago), equal to 30% of the

population[7], 10 According to Eurostat, those who experience at least one of the following three conditions of hardship are at risk of poverty or social exclusion.

1) Risk of poverty: i.e. living in households with an equivalent income below the poverty threshold of 60% of the median national equivalent income available after social transfers.

2) Severe material deprivation: lives in households forced to face at least four deprivations or sacrifices including: being able to pay the rent, mortgage or bills; adequately heating the house; facing unexpected expenses; eating meat or protein regularly; going on holiday at least one week a year; being able to afford the purchase of television, washing machine, a car or phone.

3) Low labour intensity: those under 60 years of age who live in families with very low labour intensity, i.e. where adults in the previous year worked less than 20% of their potential also increasing compared to the previous year (28.7%). This is one of the highest values at European level (EU28 average 23.5%); only Greece (35.6%), Romania (38.8%) and Bulgaria (40.4%) have the worst rates.

Goal 1: Put an end to all forms of poverty in the world

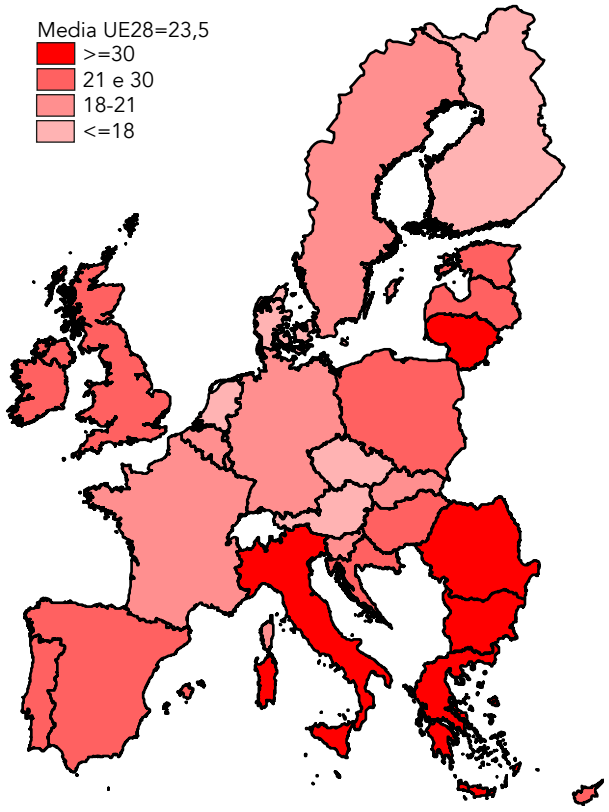
In Northern European countries (Finland, Denmark and the Netherlands), social exclusion or poverty levels do not exceed 16.7%, just over half of that in Italy.

The definition refers to a multidimensional concept of quality of life. Those who experience at least one of these three situations of hardship are at risk of poverty or social exclusion: they are in a state of poverty, i.e. they earn an income below the relative national poverty threshold; they are in severe material deprivation as they are forced to deprive themselves of goods or services that most people have; they live in families with very low labour intensity, where adults work one fifth of their potential.

In our country all three indicators show more widespread discomforts than the European average and in the last year they show a further worsening. Monetary poverty is the most significant dimension of exclusion: in Italy, one in five people are relatively poor (17.3% in the EU28); the low intensity of work reaches 12.8%, more than one percentage point than in 2015, and serious material deprivation involves 12.1% of the population, maintaining values well above those of the pre-crisis period. even if it is getting worse: 17.9% of the population is at risk of poverty or social exclusion, one percentage point more than the previous year but well below the national average (12 percentage pointsless).

Compared to the previous year, an estimated 50,000 more people are at risk, equal to the residents of a medium-large municipality in Veneto. 12.2% of the population is at risk of relative poverty,

Fig. 4.3.1 – Percentage of people experiencing poverty or social exclusion (*). EU28 - Year 2016



(*) For the definition of the risk of poverty or social exclusion, see footnote 10.
Source: Processing of data from Eurostat by the Statistics Office of Regione Veneto

7 Absolute poverty is based on the monetary evaluation of a set of goods and services considered essential to avoid serious forms of social exclusion. Families with a monthly expenditure equal to or less than the value of the absolute poverty threshold, which differs by size and composition of the household, by geographical distribution and by demographic size of the municipality of residence, are classified as absolutely poor.

5% is in severe material deprivation, while 6.7% of people live in low labour intensity households.
Poverty and social exclusion are associated with the absence of employment, so much so that the risk for the unemployed rises to 68.4% in Italy and 49% in the North-East[8] However, it should be noted with dismay that in recent years not even having a job in itself completely protects against exclusion and wages that are too low can push some workers below the poverty line. Among the employed, the risk of poverty or social exclusion is, in fact, 17% in Italy and 8% in Veneto.

Being in a state of poverty affects the possibility of being able to meet even the most basic needs of the individual. It is very worrying that almost 6% of the population in Veneto declare that they do not have the money to eat an adequate meal, of meat, fish or vegetarian equivalent, at least once every two days (11.8% in Italy). This percentage doubles for poor families (11.2% in Veneto and 23.4% in Italy).

In Veneto: povertà meno diffusa ma in aumento

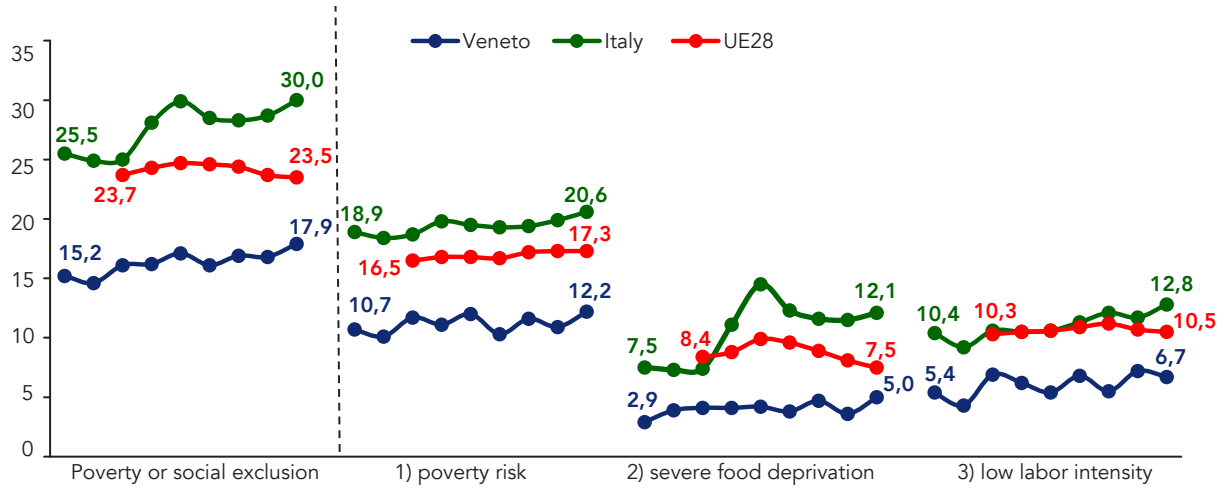
8The data is not available for Veneto.om having a home and being able to keep it in good condition, to being able to eat properly or receive appropriate care if sick.

More than 6 out of 10 people, if poor, are unable to cope with an unexpected expense of 800 euros and even less can afford just a week's holiday a year away from home.

The housing problem has spread as a result of the crisis,
also involving the so-called "grey band" of the population, i.e. the one that does not fall within the allocations provided for public housing for the income earned, but does not have the capacity to access the free market.
The severe housing deprivation involves 8.7% of the population, about 431 thousand people, who live in an inadequate house due to it being overcrowded and with problems of various kinds.
They are mainly households that are rented and old houses, young people and couples with dependent children, families formed of a single parent and people with low educational qualifications.
The percentage of people in severe housing deprivation rises to 21.3% for people at risk of poverty, who most often suffer from housing problems: 39.4% live in houses that have serious structural deficiencies, such as the presence of damp or damaged roofs, windows and doors (com-

Accessibility to basic services

Fig. 4.3.2 - Percentage of people in poverty or social exclusion (*) and in individual hardship conditions. Veneto, Italy and EU28 - Years 2008: 2016



(*) For the definition of the risk of poverty or social exclusion, see note 10.
Source: Elaborations by the Statistics Office of the Veneto Region on Eurostat and Istat data

pared to 20.5% for the total population), or that have poor light (respectively 11% compared to 5.1%).
The condition of overcrowding affects almost a third of poor families, 10 percentage points more than the population, with negative consequences on the quality of life, due to the lack of adequate space, reduced privacy, poor hygiene conditions and less opportunity to rest well.
Adequate heating of the house can also be a problem.Public housing only meets a small part of the housing needs for families in economic difficulty. There are 38,413 public housing units managed by Ater in 2016 and accommodate 72,192 citizens.

Precarious living conditions

Social inequalities not only threaten the right to housing, they also call into question the universal principle of another fundamental right of the person: health. According to the " social gradient law ", the lower the social scale, the more health is exposed to risks, diseases and death.
The reason, most probably, lies in the fact that a low social and economic status also hides other risk factors, such as greater exposure to stress, less healthy lifestyles, worse conditions in childhood and more harmful environmental situations, and less access to care and prevention.
Despite the fact that our National Health Service is considered among the most universal, with LEAs guaranteeing free and equal treatment for everyone, according to a Eurostat survey, Italy is one of the countries with the highest percentage of unmet health needs as the treatment is considered too onerous.
In Veneto, more than 315,000 people (+69,000 compared to 2009) renounced medical treatment in 2015, even though they need it, as they could not bear the costs.
The deprivation affects 7.6% of the population (11.5% in Italy), mainly for dental treatment (6.5%), but also for specialist visits (3.2%).
The difficulty of accessing care is, of course, greater for those at risk of poverty or social exclusion, highlighting a dramatic injustice. 16% of people in a condition of poverty or social exclusion, compared to 5.9% of those who have better economic resources, give up treatment for economic reasons.
In recent years, it is especially children who are at a higher risk of poverty than adults, with consequences that can last a lifetime.
In 2016, almost 25 million children in Europe were at risk of poverty or social exclusion, 26.4% of children under the age of 18; for them the risk was 3.6 points higher than for adults.
The Europe 2020 Strategy has certainly given new impetus to the fight against poverty and social exclusion, but combating child poverty is not an explicit objective of the Strategy. However, given the worsening situation for children, it is clear that the eradication and prevention of child poverty

Health denied

is an essential component of the efforts made by the EU and its Member States in this area and falls within the scope of the European Platform against Poverty and Social Exclusion. With the 2013 Recommendation "Investing in Children to Break the Vicious Circle of Social Disadvantage", the European Commission reaffirms the key role that social investment in favour of children helps reduce poverty in society, ensuring that future generations do not suffer from disadvantages and social exclusion. The Commission recommends that Member States adopt policies to tackle child poverty through multi-dimensional strategies based essentially on three key principles: reduce income poverty and material deprivation of families by facilitating parents' participation in the labour market and reinforcing redistributive measures on low-income groups; ensure access to affordable quality inclusive services to increase children's well-being and develop them (early childhood services, education, improving the responsiveness of health systems to meet the needs of disadvantaged children, providing children with an adequate and safe living and accommodation environment); and strengthen children's right to participate in society. The European Parliament also expressed its views in its resolution of 2015 on 'Reducing inequalities, with particular attention to child poverty'. However, they are still only recommendations, unfortunately not fully implemented by the Member States, which are not obliged to report on their progress in this area.
Although there are different trends, no European country is immune to child poverty. Even in the Northern European countries, which historically have lower levels of inequality and highly developed welfare systems, the percentage varies between 14% and 20%. With the exception of a few realities that prove more protective towards children, the risk of poverty or exclusion for children is always

Tab. 4.3.1 - Indicators of material deprivation: total and by people in poverty. Veneto, Italy and EU28 - Years 2015: 2016

	Veneto		Italy		UE28	
	Total	of which are	Total	of which are	Total	of which are
Percentage of people who::						
cannot afford a protein meal with protein at least once every two days	5.7	11.2	11.8	23.4	8.5	21.6
cannot incur an unexpected expense	32.7	62.3	39.9	72.0	37.4	70.7
cannot afford a week of holiday a year away from home	38.3	64.1	47.3	78.2	34.4	66.5
cannot adequately heat their home	8.9	18.5	17.0	35.9	9.4	22.7
Sacrifice specialist medical examinations for economic reasons (a)	3.2	9.3	6.5	14.5	2.0	-
Sacrifice dentist appointments for economic reasons (a)	6.5	13.8	9.6	19.0	4.0	-
are in severe housing deprivation (b)	8.7	21.3	9.6	18.9	4.9	12.3
overcrowding	*20.5*	*31.3*	*27.8*	*43.8*	*16.7*	*29.6*
presence of damaged windows, doors, roofs, floors or damp	*28.5*	*39.4*	*24.1*	*32.2*	*15.2*	*24.0*
low light	*5.1*	*11.0*	*7.0*	*11.0*	*5.5*	*8.7*

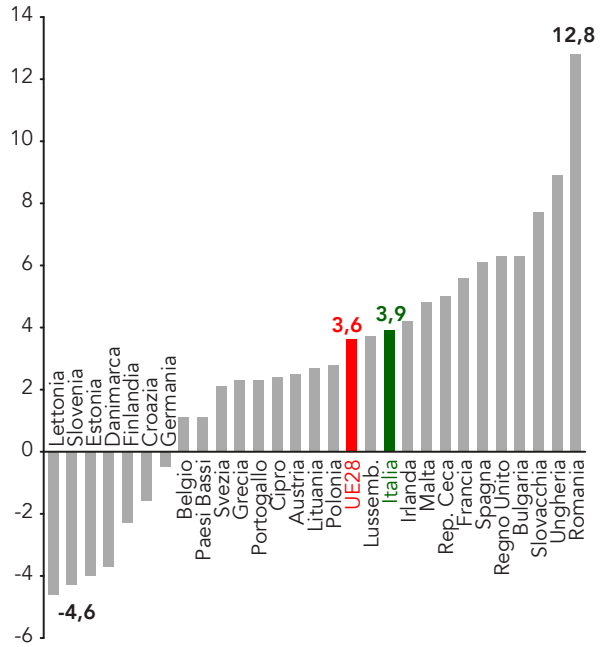
(a)The most widespread condition of poverty or social exclusion is considered
(b)People living in overcrowded housing and having at least one structural problem Source: Processing of data from Eurostat and Istat by the Statistics Office of Regione Veneto

higher than the risk for adults, up to 6 percentage points, as in Spain or France, or more (12.8 percentage points in Romania).
both for the population as a whole and for children: for the latter the risk is 33.2% (affecting about 3.2 million children and young people), almost 7 percentage points higher than the European average. The disadvantage of children compared to the adult population is 3.9 percentage points, greater than in other European countries.
In Italy, the gap between the North and South is even more evident if we look at the condition of children, given that in 4 southern regions 1 out of 2 is at risk of poverty or social exclusion, while in Friuli Venezia Giulia, Emilia Romagna and Veneto the percentage remains below 20%.
Veneto has one of the lowest numbers of disadvantaged children (18.1% in 2015), also because the phenomenon of poverty for the population in general is less widespread (16.8% in the same year). Nevertheless, even in Veneto minors are the most disadvantaged and at risk. In total there are almost 148 thousand children and young people under 18 years of age at risk of poverty or social exclusion in Veneto, 21% more than in 2009. Other indicators of deprivation also highlight the disadvantage of children and young people: for example, almost 18% of children in Veneto are in severe housing deprivation, about 10 percentage points more than the population as a whole. Particularly high is the discomfort related to overcrowding: one child in three lives in houses that are too small for the size of the family, not having enough space for themselves, not even to study. The discomfort is even

greater at national level (41.7%).
21% of children face other types of deprivation, such as not having new clothes (7.8% in Veneto as compared to 10.2% in Italy), not being able to take a week's holiday away from home (15.8% in Veneto and 25.9% in Italy), and not even able to participate in a school trip or practice sports or other extra-curricular activities for economic reasons (6.1% in Veneto, 17.3% in Italy). There are also those who do not have toys at home or an outdoor space to play or cannot invite friends home (3.2% in Veneto and 13.7% in Italy). These are just some of the tangible consequences of poverty on the lives of children.
The risk of poverty increases for children who are not only children, especially if there are 3 or more children in the family, in the case of single-parent families, if parents have low levels of education, if they are unemployed or work poorly. In Italy, almost one in two children is at risk of poverty if their parents have a lower level of education than secondary school, while the risk drops to 10.7% if their parents have a university degree. In addition, the gap has been widening over time, as people with low educational qualifications are those who have suffered the most from the consequences of the crisis.
Parents' participation in the labour market is certainly a protective factor, but often working is not enough. If parents work less than 20% of their potential, 76.6% of children are at risk of poverty, compared to 12.2% if parents work between 55% and 85% of their time or 5.4% if they work full time or almost. A secure job, therefore, with an adequate income, not just participation in the labour market, is essential for parents to be able to offer their children a fair standard of living. Furthermore, stable and quality employment increases the autonomy and self-esteem of parents, who in turn will positively influence the social and emotional stability of their children.

Povertà ed esclusione sociale: bambini più a rischio

Fig. 4.4.1 - Risk of poverty or social exclusion: difference between the percentage of children at risk and adults. EU28 - Year 2016



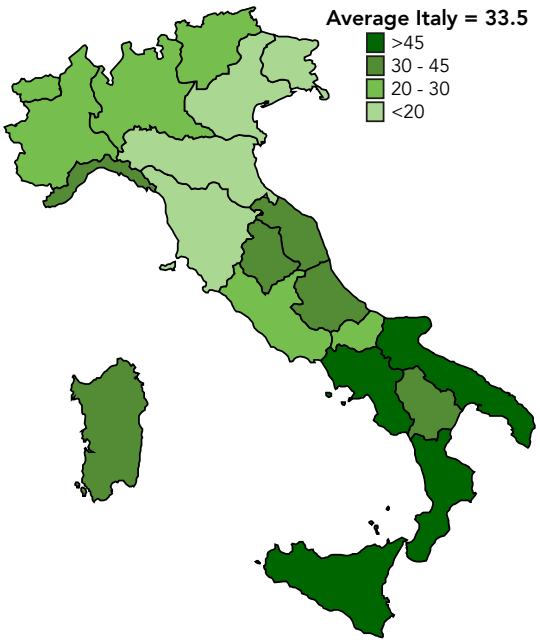
Source: Processing of data from Eurostat by the Statistics Office of Regione Veneto

Tab. 4.4.1 - Children in poverty or social exclusion and deprived housing. Veneto, Italy and EU28 - Years 2016: 2016

	Veneto	Italiy	UE28
People 0-17 years in poverty or social exclusion			
in thousands	148	3.237	24.976
%	18,1	33,2	26,4
Percentage of people 0-17 years:			
at risk of poverty	13,8	26,7	21,0
in severe material deprivation	n.s.	12,4	8,5
in low labor-intensive families	n.s.	9,3	9,3
in severe housing deprivation	17,7	11,2	7,2
overcrowding	*33,7*	*41,7*	*23,2*
presence of windows, doors, roofs, damaged floors or humidity	*33,0*	*20,3*	*17,7*
low light	*n.s.*	*5,3*	*5,9*

n.s. = Estimate not significant due to the low sample size. (*) For Veneto, the last available year is 2015
Source: Processing of data from Eurostat and Istat by the Statistics Office of Regione Veneto

Fig. 4.4.2 – Children at risk of poverty or social exclusion by region. Italy - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

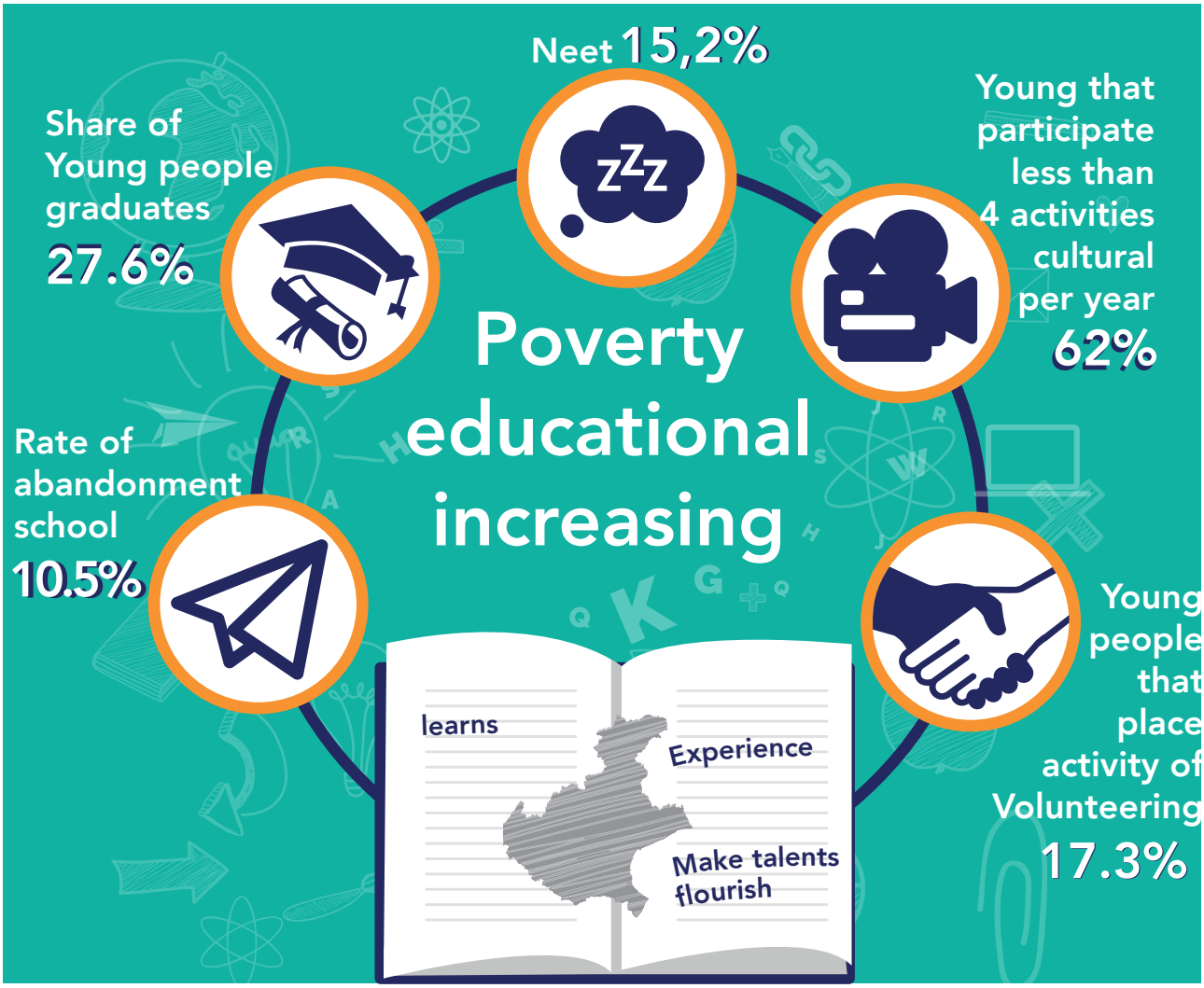
Tab. 4.4.2 - Percentage of children at risk of poverty based on parents' educational qualifications and family labour intensity. Italy and UE28 - Year 2016

	Italia	UE28
Educational qualification		
Low	48.9	52.4
average	24.0	23.8
high	10.7	8.1
Work intensity		
very low (<20% of potential)	76.6	70.4
low (20% -45%)	68.2	55.0
average (45% -55%)	32.3	27.2
high (55% -85%)	12.2	12.0
very high (85% -100%)	5.4	6.6

Source: Processing of data from Eurostat by the Statistics Office of Regione Veneto

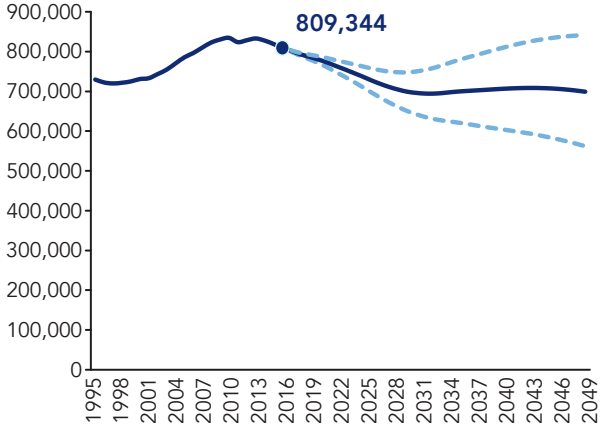
Chap. 5 – YOUTH SPECIAL

There is a close link between economic poverty and educational poverty: as in a vicious circle, the economic and educational poverty of parents is passed on to their children, who in turn will be, as adults, at risk of poverty or social exclusion. Educational poverty is referred to as the process that limits the right of children to education and deprives them of the opportunity to "learn, experiment, develop and freely foster their capacities, talents and aspirations". It is the lack of "universal" opportunities that are crucial for the integral development of the person and that should be guaranteed to everyone, regardless of the context in which they live and their social and cultural origin. As regards Italy, educational poverty is worsening in the North-East, which nevertheless still has an advantage over the rest of Italy. In Veneto, the students' Invalsi test results are brilliant, among the best at regional level. It is also true that students who come from a prosperous family environment more often leave lower secondary school with good grades, as opposed to children who belong to less well-off families. Educational poverty impoverishes working careers but also relationships, social involvement and trust in change.
Investing in schools and in children and young people means investing in the future of the country. Education must be given back its rightful place, investing in building infrastructure and services, because safety and environmental sustainability must be at home for all children, and in inclusion so as not to leave anyone behind.



The joy, curiosity, amazement and openness to the world that characterise childhood are a treasure that can neither be suffocated nor repressed, but rather must be listened to and given space, especially if we consider that there are fewer and fewer children in Italy. In 2016, Italy recorded a new negative record in terms of the number of births (-2.5% compared to 2015); Veneto, where 37,867 people were born, also recorded a decrease of 2.8% compared to the previous year and 22.1% since 2008. The number of minors is also falling (809,344 in Veneto, with a loss of about 9,700 children and young people compared to 2015) and their relative weight on the population has reduced over time: today they represent 16.5% of the population, while the over-65s are 22.3%. For the next few years, the forecasts for Veneto estimate a further contraction of the youngest component of the population, at least until 2033, the year in which it is estimated that there may be about 694,500 minors, equal to 14.2% of the population.

Fig. 5.1 - Minors (0-17 years) residing in Veneto - Years 1995:2016 and 2017 forecasts 2017:2050(*)



(*) Demographic forecasts with a base year for the population of 31/12/2016. The graph shows the estimate of the resident population according to the average forecast scenario and the estimates of the confidence interval limits at 90%.
Source: Processing of ISTATA data and forecasts by the Statistics Office of Regione Veneto

In Italy, the already precarious situation of young people, and children in particular, is becoming truly worrying. According to the WeWorld Index 2018[1] , The WeWorld Index is a summary index for assessing the progress of a country, analysing the living conditions of those most at the level of inclusion of women, children and adolescents is only "sufficient". In the ranking of the 171 countries considered, Italy ranks 27th, surpassed by most European and more developed countries. Moreover, it has been the European country with the greatest regression in the last year, differing from the EU average by 12 points (59 as compared to 71). Even if summary indices should be considered with a certain prudence, this is a critical indicator that is worth examining in depth. The worsening of Italy involves various aspects: not only does the political-environmental context worsen, but gender inequalities and family poverty also increase; these two factors that strongly influence the well-being and development of children and their inclusion in different areas, primarily the educational sphere. Among the barriers for inclusive and quality education, the problem of educational poverty is particularly acute, which is passed on from adults to children, especially in disadvantaged contexts.
There is a direct relationship between the socio-economic situation of a family and educational poverty, and the differences are usually carried on from one generation to the next: as in a vicious circle, the economic and educational poverty of parents is passed on to the children, who in turn will be, as adults, at risk of poverty or social exclusion.
As highlighted by the 2016 OECD report "Education at a Glance", Italy is one of the countries with the lowest educational mobility in Europe: among young people aged 25-34, if parents have not completed secondary school, only 8% obtain a university degree (the OECD average is 22%), while the percentage rises to 65% among those who have parents with a university degree.
Birthplace, gender, socio-economic status of the family and migration background are factors that still greatly influence dropping out of school in Italy. "In primary school, the state offered me a second-class school. Five classes in a single classroom. One fifth of the school I was entitled to. It's the system they follow in America to create differences between whites and blacks. Worse school for the poor since childhood. (...) Then my teacher told my parents not to waste their money: "Send him to the

1 The WeWorld Index is a summary index for assessing the progress of a country, analysing the living conditions of those most a

fields. He is notrisk of exclusion, such as children, adolescents and women. The term "inclusion" refers to a concept that concerns different aspects of life: economic, health, education, work, culture, politics, information, safety and the environment fit to study" (...) At the beginning I thought it was a disease of mine or at most of my family. The mother is one of those who gets intimidated by a telegram form. My father observes and listens, but he doesn't speak. (...) You push us into the fields and factories and you forget us."

These words from "Letter to a teacher" (1967) describe a bitter aspect of Italy that is still topical.

Educational poverty not only affects the children's present but also their future by impairing their careers, educational performance and development. Educational poverty is, for example, one of the main causes of youth unemployment, as early school leavers are more at risk of remaining unemployed or being employed in underpaid jobs or job for which they are overqualified.

Educational poverty is a process that can and should be changed, starting with the fight against economic poverty and guaranteeing, first and foremost, access to quality training and education services for all children, from an early age, which are a crucial point for development.

5.1 Educational poverty

Save the Children, inspired by the UN Convention on the Rights of the Child (UNCR), defines educational poverty as the process that limits the right of children to education and deprives them of the opportunity to "learn, experiment, develop and freely foster their capacities, talents and aspirations".

Educational poverty prevents children and adolescents from acquiring the skills to have a good quality of life in the present and in the future as adults. It consists of the deprivation of cognitive competences, but it translates into a wider deprivation of competences, even non-cognitive ones, such as the development of to cognitive skills, as behind weaknesses in learning, reading or arithmetic calculation there is often loneliness, lack of stimulation, motivation and self-confidence, the breakdown of the living environment and the area in which the children find themselves living.

Educational poverty: unequal opportunities

Participation in recreational and cultural activities contributes to the development of children's psychological, emotional and social skills, helps them to broaden their horizons and to feel like an integral part of society. Participation also has a positive impact on their cognitive skills, motivation and learning. Unfortunately, the lack of financial means prevents many children from participating in extracurricular activities, from growing up through sport and from contact with culture and beauty.

Educational poverty therefore means the lack of "universal" opportunities that are crucial for the integral development of a person and that should be guaranteed to all children and young people, regardless of the context in which they live and their social and cultural origin. The opportunity to learn to understand[2], i.e. to acquire knowledge and apply it in one's own life, to develop cognitive skills such as critical thinking, problem solving and decision making; the opportunity to learn to be, i.e., the opportunity to learn skills to manage one's own life with awareness, to face difficulties and to manage one's own feelings and stress: freedom of thought, imagination, motivation and self-esteem and self-confidence to create an identity, a system of values, to have aspirations and dreams to fulfil; the opportunity to learn to live together, i.e., to develop interpersonal and social skills, to feel an active part of the community, to think of the common welfare as the foundation of the individual; the opportunity to learn to do, i.e., the right to lead a comfortable, healthy and safe life, which is a functional condition for education and other opportunities to learn.

ISTAT has recently developed a multidimensional index of educational poverty (EPI[3]), emotional, relational, personal growth, self-discovery and discovery of the world. Non-cognitive skills can be developed through recreational and cultural activities, participation in sporting activities, civic engagement, as well as family and social relationships. They are often neglected, but are equally important and closely relate.

2 Classification by Bakhshi P., Hoffmann AM and Radja K., who developed the concept of educational opportunity in the "multidimensional" sense.

3 The Educational Poverty Index (EPI) measures the lack of opportunities for young people, i.e., the problems and deficiencies, not only cognitive-cultural but also of a material and relational, which undermine the integral development of the human being.

Tab. 5.1.1 - Educational Poverty Index (EPI) by gender: a summary indicator and its components. Geographical breakdowns and Italy - Years 2012 and 2015 (*)

	EPI		EPI aspects							
			Primary relationships and cognitive skills		Resilience		Social participation and participation in the training system		Comfortable, healthy and safe life	
	2012	2015	2012	2015	2012	2015	2012	2015	2012	2015
North-East (M)	89.5	91.5	87.0	98.1	95.7	98.9	84.2	82.1	90.4	84.5
North-East (F)	90.3	92.2	90.6	97.4	95.8	99.0	78.7	82.6	94.0	88.0
North-West (M)	94.6	100.2	106.0	109.4	89.2	94.6	93.3	102.1	87.6	93.1
North-West (F)	93.7	95.3	90.4	100.8	95.8	95.1	93.3	83.1	95.2	99.9
Centre (M)	93.9	97.1	83.1	93.0	99.9	100.5	95.5	98.9	95.4	95.8
Centre (F)	96.8	96.1	92.3	96.7	98.1	93.6	96.2	90.3	100.4	102.8
South (M)	114.2	118.5	116.9	124.0	114.1	114.5	115.5	115.9	110.2	119.3
South (F)	115.8	116.0	116.9	116.7	110.3	108.3	116.7	113.9	119.4	123.9
Italy	100.0	102.2	100.0	105.8	100.0	100.1	100.0	99.2	100.0	103.3

(*) Per la definizione di povertà educativa si veda la nota 3.
L'IPE è calcolato per i ragazzi 14-29 anni e, così come gli indicatori di sintesi delle diverse dimensioni, assume valori nell'intervallo 70-130, dove 100 è associato alla situazione dell'Italia nel 2012. In questo modo i confronti spazio-temporali risultano semplici e immediati: valori inferiori a 100 denotano una migliore condizione in termini di povertà educativa rispetto alla situazione media nazionale del 2012; al contrario valori superiori a 100 indicano una situazione più grave.
A livello di ripartizione l'IPE è calcolato da Istat solo separatamente per genere.
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati Istat

The EPI is composed of four aspects, each of which is a summary of The EPI is calculated for 14-29 year olds and, like the summary indicators of the different aspects, it assumes values within a range of 70-130, where 100 was associated with the situation in Italy in 2012. In this way, space-time comparisons are simple and immediate: values below 100 indicate a better condition in terms of educational poverty compared to the national average in 2012; on the contrary, values above 100 indicate a more serious situation.
In terms of distribution, ISTAT only calculates the EPI separately by gender. Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto consisting of a set of indicators that measure the four aspects of educational poverty just described. Specifically, ISTAT defines the 4 aspects as: "Primary relationships and cognitive skills", "Aptitude for resilience", "Social participation and the various critical features.
1-"Primary relationships and cognitive skills" encapsulates the following limitations: not having books at home (or 25 at most); not having friends or not seeing them; low digital skills; low language skills and low mathematical skills.
2-"Resilience": low psychological status index; low interest in cultural or other leisure activities; no reading of books (or at most 3 in one year); NEET.
3-"Comfortable, healthy and safe living": being at risk of poverty or social exclusion; not doing sport; living in run-down areas without green spaces; low physical status index.
4-"Social participation and participation in the training system": not participating in voluntary activities; little interest in politics; not reading newspapers; not using the Internet; not attending language

Educational poverty Is worsening

courses, computer courses, etc.; dropping out of school early

The EPI is calculated for 14-29 year olds and, like the summary indicators of the different aspects, it assumes values within a range of 70-130, where 100 is associated with the situation in Italy in 2012. In this way, space-time comparisons are simple and immediate: values below 100 indicate a better condition in terms of educational poverty compared to the national average in 2012; on the contrary, values above 100 indicate a more serious situation. For the time being, the EPI is only calculated at national level and broken down for the years 2012 and 2015. Since regional details are not available, it is not possible to describe the phenomenon of educational poverty in Veneto precisely; however, the figure for the North-East can represent a valid approximation.

Better opportunities for young people in the North-East

On average, ever interested in politics; there are also many at the national level, in the three-year period 2012-2015, young people who do not keep up with the news, never reading newspapers (30.9%) or never using the Internet (12.2%).

the EPI rose from 100 to 100.2, indicating a slight worsening of educational poverty. The young people of the South are the most affected: for them the EPI value indicated a difficult situation in 2012, which was even worse in 2015. Conversely, the least critical values of educational poverty are those in the North-East, although they have deteriorated compared to 2012: for males the index value went from 89.5 to 91.5 in 2015, while for females it went from 90.3 to 92.2.

The indicator is mainly affected by the major difficulties encountered by young people in acquiring "Primary relationships and cognitive skills": for this aspect the national index increased by almost 6 points in three years. In the North-East the worsening is even more evident, almost 7 points for girls (97.4 in 2015) and over 11 for boys (98.1).

A more detailed analysis shows how the cultural disadvantage of a family (not having books at home or having very few) and the lack of relationships with peers (not having friends or not seeing them), as well as low digital , language and mathematics skills, can negatively affect the development of the person. Poverty is the lack of cultural means, not just the lack of money! At a national level, the number of those who do not have books at home (from 30.2% to 30.9%) and the number of young people without friends (8% compared to 9.9%) is growing; similarly, young people with low digital skills are increasing (from 16.5% to 20.4%) and the percentage of young people with low literary and mathematical skills remains quite high (18.3% and 25.4% respectively).

On the other hand, opportunities for young people to "participate in society and in the training system" are improving, as is also shown by the reduction in those dropping out of school early (14% in Italy in 2017 compared to 17.3% in 2012), so much so as to come close to the EU target of 11%, and of those who do not attend extracurricular training courses (from 90.2% to 88.7%). Being out of education is often linked to a lack of civic commitment and interest in society. The majority of Italian young people, 85 out of 100, are not involved in any volunteering activities and one

In the North-East, this aspect seems to have improved only for males, while for girls there has been a slight worsening, to the extent that in 2012 girls showed better skill levels than their male peers; however now they are equivalent. Compared to the average national context, the North-Eastern regions offer better opportunities of "Comfortable, healthy and safe life" for children, fundamental for a harmonious growth in the relational and social context, the opportunities in the sphere of "Resilience", i.e., the opportunity to develop confidence in themselves and in their own qualities despite difficulties, are a little less evident.

5.2 Investing in school and children is investing in the country's future

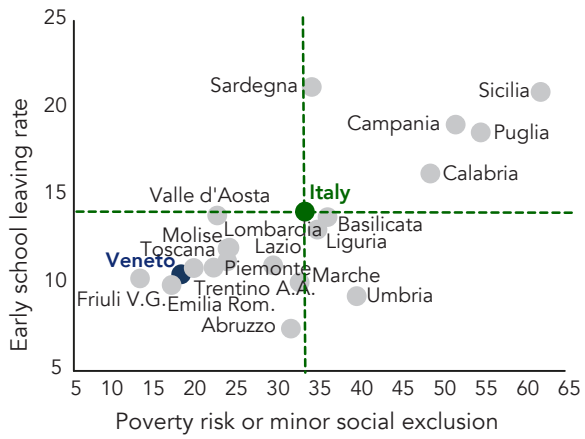
School plays a fundamental role in promoting the development of the children's ability to understand, but also to be, to live together and to do. After the family, the school is the main place for socialising and forming the personality of children and young people. It is knowledge, culture, the acquisition of know-how, but it is also education, the theatre of civil growth and citizenship; it is the place where affections, feelings and first friendships are born and grow. Over the years, young people are guided along increasingly complex educational paths so that, having entered school small and not yet independent, adults and responsible people come

out, able to make use of the knowledge acquired and to participate actively in society.
Therefore, investing in schools and in children and young people means investing in the future of the country. Expenditure on education on the GDP is one of the main indicators for the civil development of a country and allows for the evaluation the policies implemented on growth and enhancement of human capital. In Italy, public expenditure on education in 2015 was 4% of GDP. At European level, the proportion of public expenditure on education of GDP has been higher than in Italy, Denmark stands out in particular with the highest expenditure, three points higher than Italy.
The centrality of education is the result of a progressive and substantial change that characterised the decades following the second post-war period, raising the awareness that the great economic, social and cultural changes required a profound transformation of the educational processes and the school system. After the 1950s, Italy made significant efforts to eradicate illiteracy and promote social inclusion, the integration of disabled people and the integration of immigrant children. Today, it works hard to reduce school drop outs and increase access to university; however, for this to happen, it is necessary to combat the disadvantages that many children experience and put their future at risk: economic, housing, health and educational poverty.

The strong link between school failure and poverty

School, a tool to combat inequalitiesto reduce the early school leaving rate to 10% by 2020, and is already well below the target set by Italy of 16%4. It should be noted, however, that in Veneto, compared to the progressive reduction in the number of early school dropouts in recent years, the rate has risen again, losing four positions in the regional ranking in comparison with 2016 (from second to sixth position).
A vast amount of work has been written about the strong link between school failure, in its broadest sense
- low levels of learning, school drop outs, etc. -, and poverty. Factors related to early school leaving include unemployment and low income of parents and social hardship in the areas where the young person lives. People who leave education and training early are often disadvantaged, both socially and economically, compared to those who continue with them and obtain the qualifications they need to succeed in life; a vicious circle that schools can help to break, so that young people already living in disadvantaged situations can rise from their initial social level. In those that are commonly defined as "disadvantaged areas" there is a greater concentration of young people who leave education and training early or whose learning levels are lower. A look at the Italian map shows that the highest percentages of 18-24 year-olds who dropout from school prematurely are found in most southern regions, where the most difficult conditions in terms of unemployment, income and poverty are experienced. In 2017, Sicily and Sardinia had the most critical levels of school dropouts, around 21% compared to the Italian average of 14%. Conversely, the situation in Veneto is much better: the figure is 10.5%, which is in line with the Europe 2020 Strategy target4 The Europe 2020 Strategy is a ten-year strategy proposed by the European Commission in

Fig. 5.2.1 - 2017 early school leaving rate and 2015 risk of poverty or social exclusion for children by region (*

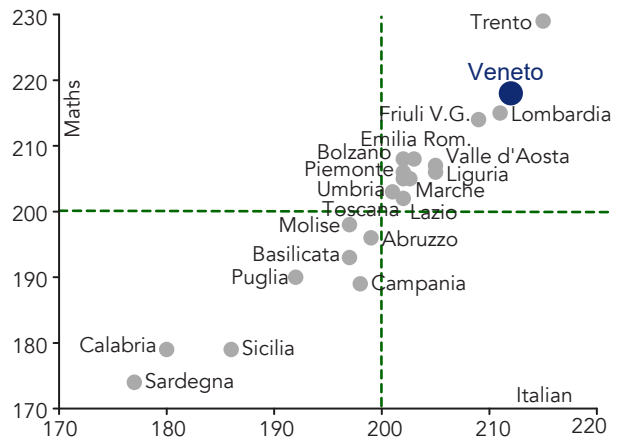


((*) Dropout rate = Percentage of 18-24 year olds with secondary education at most and who do not attend other school courses or carry out training activities for more than 2 years.
According to Eurostat, persons belonging to households that are in at least one of the following three situations of hardship are at risk of poverty or social exclusion:
1)have an equivalent income below the poverty threshold;
2)live in conditions of serious material deprivation;
3)are low labour intensive, i.e., adults work less than 20% of their potential.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

2010. It is based on a vision of smart, sustainable and inclusive growth and identifies priorities and goals to be achieved. Given the initial situation of the early school leaving indicator, the Italian government has set a more realistic target of 16% for Italy (to be achieved by 2020).
20.9%, while Veneto is among the regions with the best conditions, with a low level of risk of poverty or social exclusion (the third lowest in the regional ranking) and a low rate of drop outs.
The second European educational target of the Europe 2020 Strategy, which aims to raise the amount of 30-34 year olds with a university degree to at least 40% by 2020, also shows a setback in Veneto: after years of growth, unfortunately this year the amount has suffered a drop of two percentage points compared to the 2016 figure, which was close to 30%. However, the condition of Veneto remains good as the value is 27.6%, compared to 18.6% in 2010 and above the Italian figure of 26.9%, exceeding even the most realistic target of 26% set for 2020 by the Italian government.

Brilliant results for Veneto upper secondary schools

Fig. 5.2.2 Average scores in Italian and mathematics of pupils attending the second year of the upper secondary school by region (*) -



((*) The green dotted line represents the national average value conventionally set at 200.
Source: Processing of data from Invalsi by the Statistics Office of Regione Veneto

The Invalsi data on the level of learning of those enrolled in the second year of upper secondary schools also shows that the worst performance is found in the southern regions. In Veneto the level of poverty is lower, thanks to greater supply of work and more
Opportunities; pupils' results are brilliant and our youths stand out, reaching the top in the regional ranking for the highest scores, both in Italian and in mathematics. In 2017, the Veneto pupils obtained an average score of 212 in Italian and 218 in mathematics, in both cases it was the second best value among the Italian regions, the province of Trento leading with a score of 215 and 229 respectively.

The influence of social status

Children's skills and abilities clash with the opportunities offered by the family. "Social status" refers to the position that an individual has in society in relation to other individuals: it is determined by several factors, such as possession of material goods, employment position, access to economic resources, culture and social prestige. Historically, the influence of social status in determining results, both in terms of education and social prestige, has been broad and widely demonstrated[4]. Since the birth of the Italian Republic, the educational system, in order to follow its constitutional principles, has tried to move increasingly towards a model that would allow all students to pursue and achieve their educational and training goals based on their skills and not the characteristics of their families.

The family of origin influences school results and choices...

However, The family of origin influences school results and choices...it should be noted that the influence of the family of origin is already evident from the analysis of differences in pupils' lower secondary school final results and the paths they choose afterwards. The 2015 ISTAT survey on study and work paths of those who concluded secondary school in 2011 has allowed to construct a summary indicator of social status, based on the qualifications of the pupil's parents and on their jobs[5]. In summary, Veneto pupils with a high social status more frequently get distinction/very good/

4 National Institute for the Evaluation of the Education and Training System.

5 The final indicator for family background ranges from 0 (both parents are blue collars with at most a primary school qualifica-

excellent grades from lower secondary school final exams (69%) than children belonging to families with a lower social status (53%). The most studious children (those who conclude lower secondary school with a distinction/ very good/excellent grade) then mostly enrol at technical school if they come from families with low social status, or if they come from medium-high social status families, at a lyceum. Young people who have encountered further difficulties (i.e., who got a sufficient/good grade at lower secondary school final examination), will continue by enrolling in a technical school or a lyceum if they come from high social level families, but if the come from low social status families they are more likely to choose a vocational school.

Vocational schools are attended mainly by young people who come from less elevated contexts: of all those enrolled in vocational schools, 59% come from families with a low social status; vice versa, 50.4% of those enrolled in lyceums have parents with higher educational qualifications and professional positions. Fortunately, it should be stressed that even though the social status still influences the choice of the type of school to attend after lower secondary school, some barriers seem to have weakened: this means that in 2011, compared to the seven previous years, for each social status the share of children who choose a lyceum rather than a technical and/or vocational school was clearly higher. For example, in 2004, among those coming from a family with a lower social status, the choice of a lyceum occurred in only 8.4% of cases, while in 2011 it reached 21%.

...and the child's future

The family of origin's influence is also evident when pupils complete upper secondary school, both in the final grade achieved and in their choices on their future. 42.2% of those who qualified from upper secondary school in 2011 in the North-East passed the baccalaureate exam with a mark of more than or equal to 80; this figure rises to 47% for those coming from a family with a high social status and falls to 42.5% for those with an medium social background and 36.5% for those with a lower social status. After upper secondary school, the choice of work of going to university also seems to depend on social status. Young people with low social status families mostly choose to work, while young people with high social status families go to university: in Veneto, 33% of young people with low social status who continue their studies after upper secondary school, against 71% of those with a high social status.

Finally, the social status also influences the work situation months taken to find it. In fact, in 2015 the total number Veneto graduates who were still studying and not working was 5.4%; this percentage rises to 7.2% among young people from families with a high social background and drops to 3.7% for those with a low social status. Conversely, young people with a low to medium status work and do not study, or work at the same time as studying more frequently than others. The type of work also changes: graduates from a family with a high social status are more inclined to work independently. In detail, in Veneto, 57.7% of graduates with a high social status are employed against 70.5% of those from a lower family position, while 17.3% are self-employed against 12.6%. Finally, almost 47% of young people with a low status are still working before the end of their level II degree[6], compared to 32% of those with a high status. In short, those who come from a more affluent family can afford to find work more calmly, perhaps not accepting the first job offered.

In conclusion, being born in certain social environments rather than in others still makes a difference, and at the age of fourteen the path of a young person seems to already be set: if the parents have a university degree and a highly qualified job, they will have a good chance of enrolling in university, regardless of the secondary school attended. If the parents have a lower level of education and do simpler jobs, their children are more likely to choose to enter the labour market. It is necessary to work on a swift implementation of a rebalancing policy of educational opportunities for young people, more directed towards talent rather than birth.

Investing in a good school environment for better education and inclusion

Safe and welcoming buildings allow the peaceful development of teaching activities. Security, accessibility and the creation of environments adapted to the new teaching methods based on multimedia and laboratory activities are key elements for a po-

tion) to 100 (both parents are executives or entrepreneurs with a university degree or post-graduate qualification).

6 Graduates in two-year 2nd level programmes to its characteristics and the number of or in single cycle master programmes.

sitive schooling experience. To this end, the improvement of school buildings is an important point in the education reform "La Buona Scuola" (The Good School) and in recent years it has been allocated significant financial and national programming resources, with the of university graduates: from the job they get at the national level, with an aim to ensure security, renovation, construction of new school buildings and the development of innovative design.

More than half of school buildings were built prior to 1976

Renewing school assets is an obvious necessity, considering that more than half of Italian state school buildings were built before 1976 (57.4% of cases in Veneto)8.

The school bus service is good but not enough for disabled pupils

In the 2015/16 school year there were over 4,400 active public buildings9 in Veneto, which ranks second after Lombardy.

Attention to places of learning and related services helps

to make the time at school pleasant and to make it become a true living space. The efficient use of resources and the creation of an optimal transport network for both people and goods are essential.

In Veneto, 45% of school buildings are connected by urban public transport and 46% by inter-urban public transport. Furthermore, the number of facilities reachable by school bus is nearly 74%, compared 62% on average in Italy; with this value Veneto ranks fifth in Italy, but only 26% of school buildings have a transport service dedicated to disabled pupils (against the national 41%). In greater detail, out of the Veneto provinces, Vicenza has the highest share of school buildings served by a school bus service (84%) and Padua the lowest (59%). As far as the disabled pupils' transport is concerned, the provinces with the most services are Rovigo and Venice, where 52% and 44% of school buildings respectively have this service available[7]. improving the safety, environmental sustainability and quality of infrastructure. Sustainable and student-friendly schools for growing in a healthy and safe environment: school is the place where children have to face the long and demanding path of education. Therefore, it is essential and fruitful to provide them with a proper environment to experience their "educational realisation", which is a prelude to their work, community and social life.

In Veneto, safer and more sustainable schools

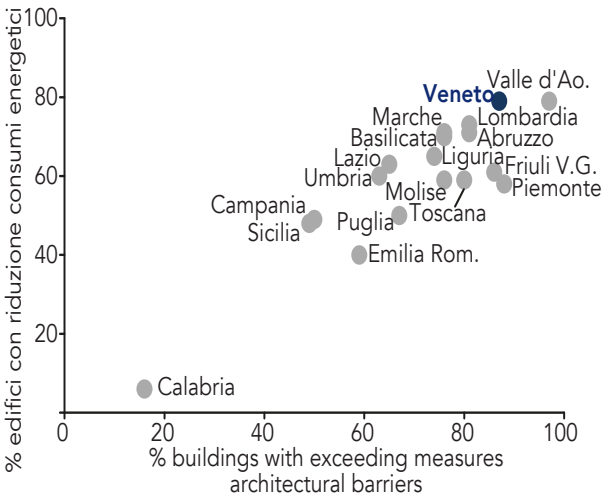
In five provinces of Veneto, 90% or more of the buildings have a Risk Assessment Document[8], the percentage is lower in Verona and Treviso. Between 84% and 96% of school buildings also have an Emergency Plan. Rovigo records the highest values in both cases.

In 2015, 87% of school buildings in Veneto had measures to overcome architectural barriers - access with ramps, doors with a minimum width of 0.90

7 Data from the current Register of School Buildings. The Observatory for school buildings, provided for by Art. 6 of Law no. 23 of 1996, which after its initial establishment had not been consulted for almost twenty years, on the initiative of the Ministry of Education, Universities and Research (MIUR) resumed its activities in 2015, and since then it has become the centre for priority planning and the making of policies for the development of school buildings.

8 Active public school buildings are buildings where activities related to educational institutions are carried out

Fig. 5.2.3 - Percentage of school buildings with measures to overcome architectural barriers and reduce energy consumption by region (*) - Year 2015



(*) Data from Trentino Alto Adige is not available
Source: Processing of data from MIUR by the Statistics Office of Regione Veneto

m, toilets for disabled people, etc. - and 79% had identified solutions to reduce energy consumption, e.g., through heat system zoning, double glazing, solar panels, etc. In both cases,
Particular emphasis is placed on Veneto stands out as one of the first regions for the number of school buildings which have adopted such measures; the last in the ranking is Calabria. Moreover, Venice is ranked fourth out of all Italian provinces for energy consumption reduction solutions (86% of school buildings).

What the school children think

A good school environment can be a positive factor for growth and has a significant influence on the well-being of students. Children who have a difficult relationship with schools are more exposed to the risk of running into emotional and behavioural problems and rejection by peers. Conversely, those who appreciate school, go there willingly and feel valued and actively participate in the classroom, less frequently trigger risky health behaviour and better develop individual and group responsibility.

Most school children like it

To the question "What do you think about school? Do you like it?" most of Veneto pupils10, like their Italian peers, seem satisfied with the school they attend: 66.4% of those aged 11, 57.3% of 13 year olds and 59.7% of 15 year olds answered "I like it very much" or "I quite like it" (in Italy, 67.6%, 56% and 60.3% respectively). In every age group most of pupils having a positive opinion of school are girls. The "very happy" ones are clearly less, just 1 in 10 between 13 and 15 years old.
As age increases, the level of stress perceived and experienced at school also increases; in Veneto these levels are even higher than the national average: 48% of 11 year olds, 59.8% of 13 year olds and 68.6% of 15 year olds state that at school, they suffer "very much or quite much". In particular, it is 11 year old boys the ones who feel the stress associated with school life most strongly; as regards girls, those who state that they very often feel stresses by school are 13 and 15 year old girls.
Attitudes towards school depend largely on the quality of the relationships that pupils establish with teachers and classmates. A positive relationship with teachers improves school success, reduces the number of aggressive attitudes and risky

Tab. 5.2.1 - The children's opinion of school. Veneto - Year 2014

	11 years			13 years			15 years		
	male	female	total	male	female	total	male	female	total
% agree or strongly agree									
I feel I belong to this school	73,0	76,9	74,9	61,7	66,4	64,1	54,6	61,9	58,4
our school is a nice place to be	64,7	72,9	68,7	48,5	53,6	51,1	43,2	57,2	50,5
my teachers accept me for who I am	82,3	88,2	85,1	75,1	73,6	74,3	63,8	59,0	61,3
my teachers treat me right	73,4	77,9	75,6	59,0	55,5	57,2	37,9	36,1	37,0
I have trust my teachers a lot	73,2	73,7	73,5	57,0	59,2	58,1	39,5	33,0	36,1
my classmates like being together	85,7	84,0	84,9	84,9	74,5	79,5	76,9	66,9	71,7
most of my classmates are kind and helpful	66,2	65,6	65,9	57,8	49,6	53,5	58,7	61,3	60,0
my classmates accept me for who I am	75,1	74,9	75,0	69,9	56,2	62,8	74,7	58,6	66,3

Source: Processing of data from HSBC by the Statistics Office of Regione Veneto

behaviours, as well as being an important source of support for the child in times of growth and change.

The relationship with teachers is better for younger children

Most the youngest, the 11 year olds, say they have an excellent relationship with teachers and trust them (73.5%), feel accepted for who they are (85.1%) and feel they are treated fairly (75.6%).
This fosters a sense of belonging to the school (75% of 11 year olds) which is considered "a nice place to be" (69%). Enthusiasm diminishes as age increases, and reaches its lowest in pupils aged 15.
The role of peers within the school is equally important.

Pupils who have good relationships with peers perform better

The type of relationship a pupil establishes with their classmates can promote their involvement or lack of interest in school activities, thus influencing their motivation to achieve good results. Students who have good relations with classmates are more motivated and more involved in educational activities, thus achieving greater school success; on the contrary, students who fail to establish good relations with classmates tend to have worse grades, to be absent more often than others, and more often develop socially inadequate behaviours.
In general, the opinion expressed on relationships with classmates does not show any particular problems, on the contrary, boys mainly feel accepted for who they are and are pleased to be with their classmates. The highest rates of satisfaction are observed among those aged 11, and the least friendly relationships seem to be those affecting the middle class of 13 years.

5.3 School as an opportunity for integration and inclusion

Since at least the 70s Italy has been dealing with the issue of school integration, first focussing on poor and peasant class children, then on disabled pupils and afterwards, broadening focus to include all forms of diversity which were previously managed through special classes and schools.
The aim of integration was to allow equality in access to schools and eliminate any separations that were not useful for the development of the child, but all this that ended up making discrimination permanent rather than removing it. With the arrival of children of immigrant parents, schools had a new opportunity to test and extend this spirit of integration, not only in terms of the right to access but also in terms of enhancement of the individual characteristics of each child. Foreign children carry cultural and linguistic baggage, family relations and community references: ensuring them access to school but asking them to leave their "baggage" out as something superfluous or useless means risking to lose the cultural dimension and inclusiveness of integration.
In Italy, education is a universal right and the "Guidelines for the admission and integration of foreign students", published by Ministry of Education, Universities and Research (MIUR), state that foreign minors, like Italian ones, are first and foremost people and, as such, have rights and duties that do not depend on their national origin. In accordance with this principle, schools accept the enrolment of foreign students even if they do not have identity documents, as their illegality cannot remove their right to education. The said Guidelines also promote intercultural education "which rejects both the logic of assimilation and that of coexistence between closed ethnic communities, and is aimed at encouraging comparison, dialogue, mutual recognition and enrichment of people in respect of different identities and affiliations and plurality of experiences, often multidimensional for each person, Italian and not "[9]. Integration and inclusion are therefore equally as important in the Guidelines of today's Italian school.Increasingly plural and intercultural

Increasingly plural and intercultural Increasingly plural and intercultural

The number of foreign students in Italian schools12 has grown considerably over the years: in the 2016/17 school year there were 645,120, almost 60% more than 10 years earlier. The majority live in the North-East (37.9%), and 25.5% live in the North-East. In Veneto there are 71,528 foreign students, that still has strong links to the age of arrival in Italy. For those born abroad, school integration is one of the most delicate points as it involves the

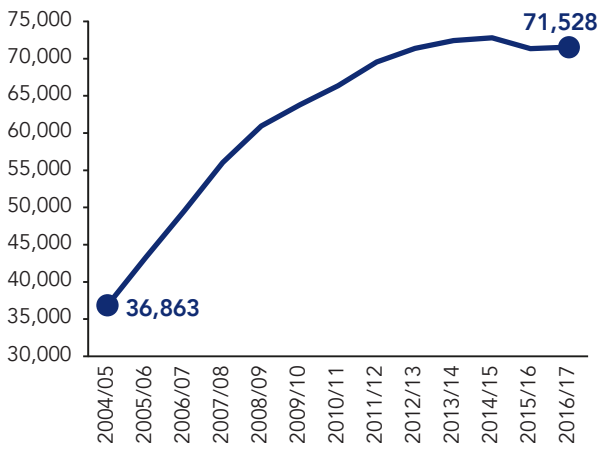
9 Miur, "Linee guida per l'accoglienza e l'integrazione degli alunni stranieri", February 2014.

assessment not only of the age and studies undertaken by the student in their country, but also of their skills, abilities and learning levels.
Today, school classrooms are undoubtedly more multicultural places than a decade ago: 12.4 pupils per 100 are foreigners (9.2 in Italy), in 2006 it was 9 (5.6 in Italy). Classes are the more varied in the first few years of school: 15.4% foreign pupils in primary school, 13% in lower secondary and 8.6% in upper secondary school. However, the aspect of multiculturalism must be understood in a broad sense, given that 55% of foreign pupils in Veneto were actually born in Italy and their incidence is even greater when only considering primary school (76.6%).
The integration and educational inclusion of foreign students are processes that are carried out along two main lines: to bridge the disparities between Italians and foreigners and, between these, to bridge the gap between those born in Italy and those born abroad, a gap are enrolled in the regular course year, with a higher incidence in primary school (57%); a trend in line with the national figure.
Once the integration phase completed, the school career challenge arises. Children and young people with a migrant back-ground tend to repeat a few school years more frequently than Italian students (27.7% against 14.3%), even more so if they are born abroad and not in Italy (31.8% against 18.8%). In Veneto, the situation with regard to the number of remedial foreign students is even more exacerbated than in Italy. The various studies on the educational integration of foreign students show that integration difficulties do not relate to problems of cognitive learning or knowledge of the Italian language, but to problems relating to teaching methods commonly used in Italian schools. The socio-economic status of the families from which the foreign children come is a determining factor, since they are often families with less economic opportunities and with little opportunity to support and cope with any educational difficulties of their child.

Foreigners born abroad and born in Italy

Differences between Italians and foreigners persist, even in the choice of school address and
study path Foreign secondary school pupils who choose to continue their studies prefer to go to a vocational school (44.5% compared to 33.8% of Italians); in contrast, Italians more often choose a lyceum (40.4% compared to 31.5% of foreigners). The choice is consistent with the social background of the young people's families, who are very often poor, and for this reason they commence work promptly through the acquisition of skills that can be immediately used. For the same reason, 46.7% of foreign adolescents (41.4% in Italy) say they want to start work after secondary school; the percentage drops to 32.7% for Italian adolescents.

Fig. 5.3.1 - Foreign pupils. Veneto - SY 2004/05:2016/17



Source: Processing of data from ISTAT and the Regional Observatory on Immigration by the Statistics Office of Regione Veneto

All-round inclusion

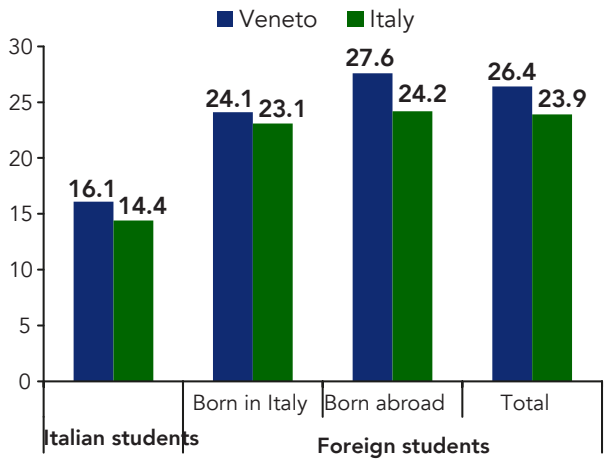
Tab. 5.3.1 - Percentage of pupils who repeat the year by citizenship and place of birth. Veneto and Italy

	Italian students	Foreign students (a))		
		Born in Italy	Born abroad	Total
Veneto	16.3	25.4	38.7	34.0
Italia	14.3	18.8	31.8	27.7

(a) Foreign pupils born abroad and who have been in Italy for a year or less are excluded.
In Italia since one year or less
Source: Processing of data from ISTAT by the Statistics Office

Obstacles to inclusion are not only reflected in school related aspects, but also in aspects regarding socialisation with peers and adults outside the family. When asked about their relationship with their peers, study, teachers and parents' interest in school life, foreign children report high levels of satisfaction with their relationship with their peers and the family interest (scoring around 8 out of 10). Overall, the relationship with studies and teachers is also good (about 6 out of 10 points), a slightly better evaluation than that of Italian pupils (between 5 and 6).
The aspect of relationships that children have in their free time is more problematic. Only 16.1% of Italian children do not meet classmates in their free time, but this happens in 26.4% of cases for foreign children. These values are also higher than the Italian average (23.9%). However, among those who meet their classmates outside school, 43.5% of foreign pupils indifferently see classmates of Italian and foreign nationality, a good part (42.2%) only sees Italians, while for 14.4% friendship is limited to foreign peers. This latter percentage varies according to the age of arrival in Italy: it is 10% for primary school pupils and rises to 22% for those who arrived in Italy after the age of 10 years, a sign that relationships are all the more problematic the more they perceive themselves and are perceived as foreigners. The degree of inclusion can be seen also by looking at which places are most frequented by children. All young people, regardless of their citizenship, love to spend their free time in open spaces such as the street, the square and the public park or at a friend's house. Sports centres and schools for theatrical, cultural and extracurricular activities are also appreciated by all. The place that are foreigner and Italian pupils frequent to different extents include entertainment venues such as the games rooms, fast-food outlets and amusement parks, which are most often chosen by foreigners. In addition, foreign students spend less time at religious gathering places and a little more at the workplaces of parents or otheradults.
Children with a migrant background
attend Italian schools, meet their Italian peers and live in Italy, but their family is not Italian and they have a thorough knowledge of the culture of their parents. This is why they find themselves building their identity by mixing ingredients from different cultures. This gives rise to a suspended sense of be-

Fig. 5.3.2 - Percentage of pupils who do not attend schoolmates outside school hours by citizenship and country of birth. Veneto and Italy - Year 2015



Source: Elaborations by the Statistics Office of the Veneto Region on Istat data

Tab. 5.3.2 - Percentuale di alunni che frequentano(*) alcuni luoghi di ritrovo per nazionalità. Veneto - Anno 2015

	Italian students	Foreign pupils
Games room	3.2	11.2
Fast food outlet	6.7	19.9
Street, square	64.3	65.1
Fields, greens, gardens, public spaces	64.5	63.4
Church youth club and places of worship	36.5	26.0
Work places of family members or other people	17.9	19.8
Regional youth centres	10.8	11.3
Sports, theatre and music schools	21.2	21.5
Sports centre, ground	48.8	42.6
Friends', schoolmates' house	51.9	48.3
Amusement parks, rides	8.0	21.2

(*) Almeno qualche volta la settimana.
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati Istat

longing of which the children are aware. In a study conducted by the University of Milan13 this factor emerges with extreme clarity: "I feel undefined... I feel like... a good dough, a good cake, it comes out well, in other words I have been storing things on both sides... there will be some more Russian and others more Italian aspects"; and also: "I'm halfway between Italian and Chinese so my mentality is a bit Chinese and a bit Italian... and there you have to choose... having two nationalities causes an identity crises". 30% of foreign pupils in our schools do not know whether they should to define and feel themselves as Italians or foreigners. It is clear that the degree of integration and inclusion of the country of residence has a great impact on this construction of identity. It is therefore extremely interesting to understand the attitudes of children with a migratory background in respect to their possible feeling "Italian" and their intentions regarding the stability of their lives in Italy. 34.2% of foreign pupils in Veneto say they feel more "Italian", a value that is lower than the national average (37.8%) and the third lowest after Friuli Venezia-Giulia (30%) and Trentino-Alto Adige (33.4%).

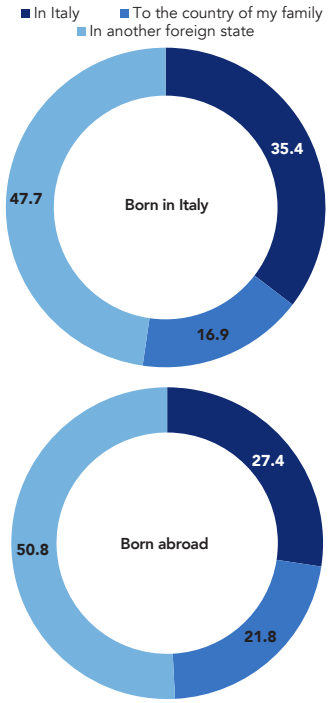
In search of identity

As far as future life plans are concerned, 30.1% of foreign children would like to continue living in Italy in the future (31.6% in Italy). The rest imagine themselves in a foreign country, which is mostly different to that of their parents (49.7%); however, it must be noted that living abroad is also a desirable prospect for 42.6% of Italian pupils.

A more in-depth analysis, distinguishing between foreigners born in Italy and those born abroad, reveals rather obvious differences, which confirm how much more attention is needed to young people who arrived as "adults". Only 27.4% of pupils born abroad wish to settle in Italy, compared to 35.4% of those born in Italy; an higher percentage would return to live in the country in which they were born (22% compared to 17% of foreigners born in Italy).

Schools are an essential integration factor and "today there is a greater awareness and the organisation has been considerably improved to favour the positive integration of foreign pupils": more than 70% of school managers think so. Inclusion remains, as we have seen, an open process that is far from over and teachers believe that among the useful measures to be taken to improve it in addition to strengthening the teaching of the Italian language

Fig. 5.3.3 - Percentage of foreign students by place of birth and place where they would like to live as adults. Veneto - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

(61.8% of teachers), the number of pupils per class should be reduced (42.1%), some specific measures should be enhanced (36.8%), but it is also necessary to use cultural mediators (27%) and better prepare teachers (19.2%).

5.4 The educating community

Learning to live together

The solution to improve educational opportunities cannot only be in schools, but in the wider "educational community", i.e., in everything that revolves around the child: school, family, sport, services, institutions, church youth clubs and all other gathering places.

The family environment is the first place where the social, emotional and cognitive development of children originates.

It is one of the main contexts in which children learn to renegotiate their social role and to reconcile different of value and rule systems.

Family relationships are particularly important in a delicate period of development such as adolescence, which is characterised by a redefinition of relationships with parents and temporarily by a greater investment in friendly relationships. The nature and quality of relationships with parents can affect the development of pre-adolescents and adolescents by influencing their adaptation, well-being and adoption of healthy lifestyles. It has been shown, for example, that positive communication between parents and children can play a protective role with respect to behavioural choices and the general well-being of children, in particular with respect to the development of depressive symptoms, anti-social behaviour, low self-esteem and school problems.

In Veneto Most children aged 11-15 believe that there is generally a good level of communication in their family: they seek dialogue, discuss important things (about 80%), there may be misunderstandings but they talk about it and try to clarify matters as much as possible, even if it is not always easy. Above all, 7 out of 10 young people say that they feel listened to and receive attention when they speak, which is certainly a positive thing.

The family

It is also true that as teenagers grow older it becomes increasingly difficult for them to talk to their parents about things that really worry them; there are also greater difficulties in communicating with their father. 85% of children aged 11 can talk easily with their mothers about their concerns, 70% can do that with their fathers; as for children aged 15, 67% still maintain a certain confidence with their mothers but only 1 in 2 with their fathers. Within each age group, the mother remains the most preferred by both boys and girls to talk about their problems with, whereas the father is often perceived as less involved and present in relationships. It is mainly girls, as young as 13 years old, who do not feel able to talk freely with their father about their experiences and concerns.

On the whole, however, the family continues to play a central role in the experience of children of the age considered; therefore, despite the growing demand for autonomy, children still need emotional support from their parents; their relationship does not break but rather changes. Teenagers understand that their parents are really trying to help them, they find the support they need from them, and they also find help in them for making conscious decisions.

The time that children spend with their peers outside adult supervised contexts

is crucial for the development of social skills. Social interactions between peer in fact strengthen values and models, help build the sense of identity and give a cultural orientation for life outside the family. Pre-adolescents and adolescents believe in friendship and agree that with the friends they see even

Tab. 5.4.1 - - Family communication. Veneto - Year 2014

	11 year olds			13 year olds			15 year olds		
	male	female	total	male	female	total	male	female	total
% agree or strongly agree									
important things are discussed	79.9	79.9	79.9	80.7	74.9	77.7	81.6	74.9	78.1
if there are misunderstandings they are clarified	78.8	74.5	76.7	71.2	60.4	65.6	72.0	56.9	64.1
when I speak. someone pays attention	75.5	73.5	74.5	77.5	65.3	71.2	79.7	67.6	73.4
How easy it is for you to talk to these people about things that concern you (% easy or very easy)									
with my mother	85.7	83.2	84.5	75.7	69.3	72.3	68.6	65.6	67.0
with my father	76.0	61.1	68.8	64.6	42.0	52.9	60.1	34.9	47.0

Source: Processing of data from HSBC by the Statistics Office of Regione Veneto

Tab. 5.4.2 - Family relations. Veneto - Year 2014
Average values of proposed statements (1 = Disagree, 7 = Strongly agree)

	11 year olds			13 year olds			15 year olds		
	male	female	total	male	female	total	male	female	total
My family									
really try to help me	6.4	6.4	6.4	6.1	5.9	6.0	6.2	5.8	6.0
give me the emotional backing and support I need	6.2	6.2	6.2	5.9	5.5	5.7	5.9	5.4	5.6
really try to help me make decisions	6.2	6.2	6.2	6.0	5.8	5.9	5.9	5.5	5.7

Source: Processing of data from HSBC by the Statistics Office of Regione Veneto

outside school they can share both enjoyment and sorrow, confirming a relationship that goes beyond recreation and fun (average score of 6 where 7 is "strongly agree"). They feel free to talk to their friends about everything, including personal problems, and try to help each other (score 5.5).
Looking at older children,family and friendships completely satisfy 9 out of 10 children and contribute to their good quality of life. Even for young people aged 14-29, affections as a source of moral as well as material support are values that remain stable in terms of importance and which are hold in the face of times of difficult economic situation. In case of need, Veneto young people know that they can count on the help of friends (85%), relatives (62%) or other people (67%). Friends are above all the real points of reference for most of young people of this age, to friends they can confide their fears and hopes, in the certainty of being understood and not judged, more than with parents. Children spend most of their free time with friends: 87.5% see them at least once a week, 27.8% see them every day.

Friends

On the one hand there are young people who have the strong enthusiasm and hopes typical of their age and are therefore satisfied with life and optimistic for the future (58.6% in Veneto and 55.3% in Italy); however, on the other many young people show suspicious and disheartened, especially towards public institutions. Outside their own family or friendship network, there is a climate of distrust and mistrust even among the youngest, especially towards those who they do not know, so much so that only 18.6% of young people aged 14-29 in Veneto trust people in general (compared to 21.6% of the population as a whole). While it is difficult to trust people, "trusting" institutions is even more difficult. For young people, political parties have lost credibility (average score of 2 out of 10), as well as the judicial system and the Parliament/ Government at the different levels. They only have positive opinions for the police and the fire brigade, whose generosity and readiness to intervene in the most critical moments they appreciate.

The importance of relationships as young people grow

The political system appears increasingly distant from the daily lives of people, especially young people who feel neglected. Therefore, the lack of interest of the latter in politics is not surprising: almost a third of the 14-29 year olds in Veneto never deal with political issues and 26% do not even know the main facts of Italian politics, above all because they are not interested and do not believe in it. Most of those who usually stay informed choose the Web, namely in Veneto, 36% of 14-19 years olds 57% of 20-29 year olds. With the spread of new technologies, a new way of becoming interested in politics and institutions is emerging through the Internet: we talk about cyber-citizens, young people who use the computer network not only to gain information, but also to exchange information on social and political issues, including the use of social networks.

Young people disappointed by politics and the system

Despite the lack of confidence in institutions and the widespread lack of interest in politics, young people still pay attention to pu-

Tab. 5.4.3 -Social indicators for young people. Veneto and Italy - Year 2016

	Veneto		Italy	
	14-19 years	20-29 years	14-19 years	20-29 years
Overall satisfaction with one's life				
average score (0-10)	7.5	7.0	7.5	7.0
% of people				
satisfied with family relationships	91.4	91.1	90.3	89.5
satisfied with relationships with friends	93.7	87.6	91.6	88.4
they see friends often (at least once a week)	86.1	88.3	92.9	88.1
they have friends they can count on	89.2	83.1	79.7	79.1
they have relatives to rely on	66.7	60.0	62.6	57.4
have other people you can rely on	65.9	68.0	63.8	61.4

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Tab. 5.4.4 - Social commitment indicators. Veneto and Italy - Year 2016

	Veneto		Italy	
	14-19 years	20-29 years	14-19 years	20-29 years
Trust in public institutions (average score between 0 and 10)				
Italian Parliament	3.3	2.8	3.9	3.4
European Parliament	3.9	3.4	4.5	3.9
Regional Government	4.1	3.6	4.1	3.5
Municipal government	4.6	4.2	4.6	4.2
Political parties	2.8	2.2	3.1	2.5
Judicial system	3.9	3.3	4.6	4.2
Police	6.0	5.7	6.2	6.1
Fire brigade	7.6	7.7	7.8	7.7
% of people				
they never talk about politics	38.6	23.9	47.0	32.8
they never inform themselves of the facts of Italian politics	34.1	21.9	43.0	27.0
because not interested or discouraged by Italian politics (among those who do not inform)	73.9	85.9	84.9	94.0
informs via web (among those who inquire)	35.7	57.0	37.3	49.5
in the last 12 months they have carried out voluntary work	20.4	15.6	11.6	12.3

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

blic affairs, engaging in the world of associations and volunteering. The ability to shift interest from oneself to others, committing oneself to the well-being of the surrounding community, is an important indicator of a young person's maturity as they approach adulthood with civic awareness.
In its cultural traditions, Veneto boasts a wealth of values that also includes a sense of belonging, rootedness in the region, attention to those who are at a disadvantage and taking care of the cultural and social development of their community. This is demonstrated by the widespread participation in volunteering, which actively involves 17% of the population in Veneto, against a national average of 10.7%. Young people give a significant contribution: 17.3% of Veneto young people aged 14-29 declare that they operate for free for associations or groups of volunteers (the national average is 12%). The participation of young people aged 14-19 is even greater (20.4%) who, presumably with less work commitments, passionately devote themselves to volunteering.

Volunteering, a sign of belonging

The younger generations represent one of the riches of our society and vo-

lunteering can be a school of active participation. Volunteering encourages the development of the civil society and is a formative experience for the young people, educating them to commitment and responsibility and thus helping them to discover how the gift of oneself can also be a personal wealth.

I am a madman who reads, an outlawed madman marching to a different drum, I am the one who writes "you who read this are dumb"14

Participation in cultural and recreational activities outside of school, such as theatre, concerts, museums, exhibitions and archaeological sites, sports, reading and using the Internet, is an important indicator of educational opportunities for young people. These activities are not only simple "hobbies", but also important means of strengthening non-cognitive abilities, in particular motivation, curiosity and personal aspirations. Growing up in a culturally fertile family and social context, being in contact with music, art, reading, is important for everyone, but even more so for those who experience situations of socio-economic distress.

The lack of cultural and linguistic bases and other weaknesses found at school often affect adolescents from low-income families: children who, outside of school, do not read, do not play sports, never go to the theatre or to a concert, do not know what a museum or an archaeological site is, have few social relationships and often only virtual.

On the basis of these considerations, the situation of children in Veneto is not among the most positive: most of 14-29 year olds do not like reading, do not attend private lessons or courses and are not very passionate about culture and sports, missing out on very important opportunities for growth and training. Specifically, 7 out of 10 do not read books or at most read three in a year; moreover, more than a fifth of them say they do not have them at home or have very few. In addition, 65% do not even read newspapers (72% of 14-19 year olds).

Almost 9 out of 10 children outside of school do not attend private lessons or paid courses of any kind (languages, computer science or artistic activities) and 62% say they participate in less than 4 cultural or recreational activities per year. At national level, the percentage is even higher (69%).

In their free time, apart from the cinema, which is attended at least once a year by 86% of young people, other extracurricular cultural activities are almost or completely unknown: in the last year, 76% never went to the theatre, 64% never visited archaeological sites, 59% never participated in sporting events, 56% never went to a concert and 49% never visited a museum or an exhibition. Sport is no better, as 42% of young people never practice it, not even occasionally, and among these, 44% do not engage in any other physical activity.

Young people with few cultural interests ...

Veneto young people are not as interested in sports and cultural activities as their peers from other regions, but they are comfortable with new technologies, particularly in the use of the Internet.

Especially in recent years, the use of digital technology has acquired an important role in the daily life of citizens,revolutionising habits and ways of relating, especially among the younger generation. The literacy process and the improvement of digital skills is a path of social inclusion that is being pursued in Europe as well, so much so that the intention was to increase the number of regular users to at least 75% by 201515. Compared to the European average (80%), Italy still suffers from a serious deficit in digital literacy: in 2017, the amount of regular users accounted for 69% of the population aged between 16 and 74.

The lower use of online services in our country is due to a delay in the adaptation of infrastructure, but also to a cultural problem that is strongly linked to the difference between generations.

The process of digital literacy is now complete for young people. In 2016, 94 out of 100 young people in Veneto used the Internet regularly, i.e., at least once a week, and almost 82% went online every day, more than the national average (88% and 76.4% respectively).

Familiarity with the Web helps young people to be much more prepared to take full advantage of the Web potential.

... but they're good with technology

According to the European Commission "Digital skills" indicator16, which defines the digital profile of the user, in Veneto, 66% of young people do well with PCs and the Internet, the third highest value among the Italian regions (national average 58.7%). In particular, 39% of young people in Veneto aged 14-29 have high digital skills (43.5% in the 20-29 age

Tab. 5.4.5 - - Indicators of extracurricular educational opportunities. Veneto and Italy - Year 2016

	Veneto		Italy	
	14-19 years	20-29 years	14-19 years	20-29 years
% people that:				
they do not read books or read any more than 3 a year	64.2	72.7	72.6	74.3
do not own books at home (or no more than 25)	14.7	26.4	24.5	32.9
they don't read newspapers	72.5	61.3	72.4	59.1
do not attend private lessons or paid courses	82.5	89.9	83.6	91.6
of computer science	97.7	96.5	94.5	96.2
of languages	91.7	94.4	87.9	93.9
artistic and / or cultural activities	89.8	93.6	92.3	95.6
participate in less than 4 cultural activities per year	55.5	66.2	64.9	71.0
They never go to the theatre	66.7	81.3	67.5	77.5
they never go to the movies	16.2	12.0	13.7	17.5
they never go to museums or exhibitions	42.8	52.2	52.3	60.4
they never go to concerts	63.3	52.1	62.1	56.2
they never participate in sports shows	53.5	62.1	53.3	57.6
they never visit archaeological sites	58.6	67.3	67.1	68.7
they do not practice sports (neither continuously nor occasionally)	36.2	45.7	38.5	48.1
do not practice any physical activity (among those who do not practice sport)	50.9	41.5	51.5	53.3

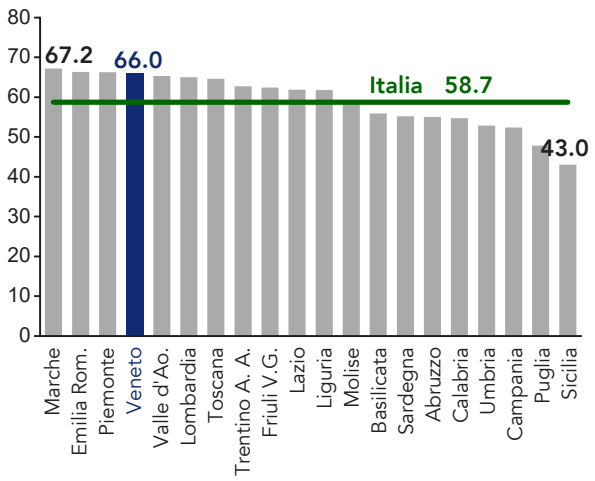
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

group) and 27% have sufficient skills to orientate themselves online with some awareness.

New dangers from the Internet

While the Internet represents a great opportunity for social interaction, which cannot be ignored, it is also a tool that can conceal significant dangers, especially when it is in the inexperienced hands of young people.
Globally, one in three Internet users is a minor and, according to a study conducted in 25 countries around the world (including Italy) by UNICEF and IPSOS17 on a sample of 18 year olds, more than 40% of respondents admit to having started surfing before the age of 13. According to the survey, 8 out of 10 young people admit that there is a risk of being subjected to some form of sexual abuse or exploitation online and more than half believe that their friends have encountered dangerous situations. Almost 60% of young people say meeting new people online is important, but only 36% say

Fig. 5.4.1 - Percentage of 14-29 year olds with at least sufficient digital skills by region - Year 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

they would know if a person they contacted online was lying about their identity.
While recognising the hazard, however, the majority of young people feel confident in their ability to surf safely, with 90% believe that they can avoid risky situations and 65% think that they cannot be bullied online or abused in any other way.
When faced with threats on the web, most teenagers turn to friends more than to parents or teachers. However, less than half of the young people surveyed say they would know how to help a friend.
For digital natives, the online and offline worlds are often a natural continuum: the experiences encountered on the Web, including negative ones, as well as those experienced in reality, have effects and repercussions on the lives of children and young people with sometimes dramatic emotional and physical consequences.
As new technologies evolve, young people can fall victim to new, even more subtle and dangerous forms of bullying, such as cyberbullying.
Cyberbullying incidents, like those of more traditional bullying, are an expression
of non-acceptance and fury towards those who are different for any reason: ethnicity, religion, psycho-physical conditions, gender identity, sexual orientation or family situation. However, on the Internet bullying can take on even greater levels of malice, favoured by the anonymity of bullies who, hidden behind a monitor, do their worst, in the belief that they cannot be recognised and therefore will remain unpunished.
In Veneto schools, 7.9% of 11 year olds, 11.2% of 13-year-olds and 6.4% of 15-year-olds claim to have suffered from acts of cyberbullying. For 11-year-olds, males are more at risk, whereas for the other ages, it is the females who are more often victims of malicious messages in chats or text messages, or who are made fun of on a message board or website.
The online publication of inappropriate or embarrassing photos is less widespread, but equally as dangerous: 3.8% of 11-year-olds and 6.1% of older people have been victims.

5.5 More quality jobs for young people to curb economic and educational poverty

We have talked about educational poverty as a risk of deprivation for children and adolescents of the possibility to "learn, experiment, develop and freely foster their capacities, talents and aspirations", and we have already mentioned the correlation that exists between educational poverty and material poverty in this chapter. The economic crisis of the last decade has had a profound impact on the living conditions of thousands of people and, as discussed in the previous chapter; it is not only a question of job losses and unemployment, since in recent years, Italy has experienced an increase in poverty even after employment had started to resume growth.
Having a job is not always enough to protect oneself and one's family from poverty, as the quality of work is also important: over-qualified18 workers, involuntary part time, fixed-term contracts and low wages are some of the elements that increase the risk of being below the relative poverty threshold and, in turn, the risk of families offering fewer opportunities for the future of their children.

Cyberbullying

In this scenario, it is once again young people who experience the most unfavourable conditions, as they are more often employed in "low quality" and "low intensity" work and therefore more at risk of being poor despite their wages.
Due to the current work situation, which threatens their future and that of their children, but also that of the entire Italy, young people are at risk of become poor in thirty years' time. Indeed, the delay in entering the world of labour, the discontinuity in social security contributions and the weak salary dynamics are factors that project an alarming scenario on the retirement future of today's young people, but also on the social stability of the country, where new conditions of poverty caused by low pensions, will be exacerbated by the impossibility for many workers to count on at least supplementary social security. Moreover, today's young people today with "low quality" and "low intensity" jobs will in turn feed educational poverty, not being able to offer their children the right opportunities.
It is therefore clear how necessary it is for the government to commit itself with determination to an intergenerational pact that guarantees children the same opportunities as their parents, and how dependent this is on more than one action.
In particular, it is necessary to work on what is on offer at school, as school is an environment where inequalities between young people due to different starting economic conditions, can be reduced

by offering everyone equal opportunities to encourage a better future even for those most in need, and is necessary to work to increase the quality of jobs available for young people. All this would greatly contribute to curbing economic poverty and therefore educational poverty as well.
In this context, let's take a look at the labour situation of young people in Veneto, also in comparison to other regions.

The future of young people: the path is less difficult in Veneto

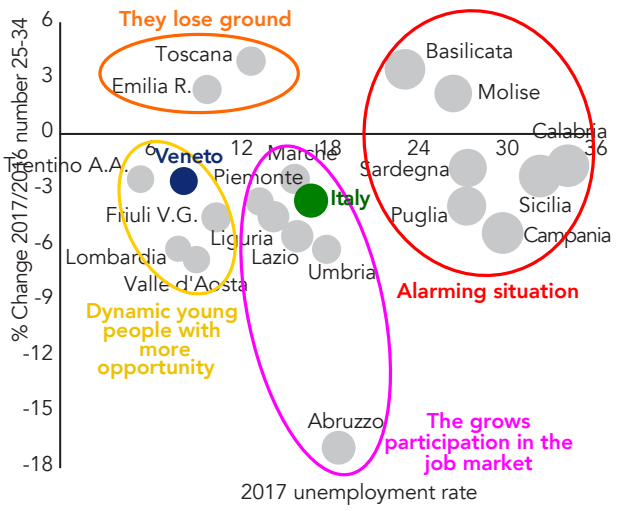
In 2017, youth unemployment continued to fall: in Italy it was 34.7%, 3 percentage points lower than in 2016, with peaks in the rate reduction of 7-10 points in some regions, namely Tuscany and Sardinia, which recorded a decrease in the unemployment rate for 15-24 year-olds of 9.5 points.
In Veneto this rate fell by almost six percentage points between 2015 and 2016, to then rise in the last year from 18.7% to 20.9%; however, Veneto still maintains second position in the ranking of Italian regions for the lowest levels of unemployment. The best situation is still found in Trentino Alto Adige (14.4%) and the worst one in Calabria, where 56 out of 100 young people are looking for work without success. Focusing on the 25-34 year olds group, whose age is more mature for seeking a job, participation and success in society are more stable; in 2017 their unemployment rate decreased in most Italian regions and reached an average national value of 17% compared to 17.7% in 2016. In Veneto, this ranges from 10.7% of last year to 8.4%, with the third lowest value among all Italian regions (first comes Trentino Alto Adige with 5.4% and then Lombardy with 8%).
This upturn is getting stronger and the fall in unemployment is accompanied by an increase in the employment rate and a fall in the number of inactive people, i.e., young people who are not part of the labour force and are therefore not counted among those who are working or seeking a job.
Aalthough the latter indicator is not present on the graph. The graph shows that Veneto, together with Trentino Alto Adige, Lombardy, Valle d'Aosta and Friuli Venezia Giulia, has lower levels of unemployment and inactivity compared to the other regions and shows a decrease in the number of inactive young people; in addition, it should be noted that between 2016 and 2017 in these regions there was also an increase in the relative employment rate and unemployment fell. In light of these positive indicators, it is proposed to include these regions in the group "Dynamic young people with more opportunities", since they are 25-34 years old and actively participate in the labour market, achieve good results in terms of employment and are therefore less at risk of social exclusion. Piedmont, Lazio, Umbria, Abruzzo, Molise, Tuscany and Valle d'Aosta have higher unemployment rates than the regions listed above, but they also show a significant decrease in in inactive people; moreover, in almost all regions over the past year employment increased and people looking for work decreased.

The best conditions for young people in Veneto

In summary, the label "Growing participation in the labour market" is proposed for these regions. Abruzzo also belongs to this group, with a drop in the number of inactive people of almost 17%. Emilia Romagna and Tuscany, on the other hand, have "lost ground" in the last year: in fact, the number of inactive people has increased, employment levels dropped and unemployment increased in Tuscany and remained stable in Emilia Romagna. Finally, the "Alarming situation" group includes the southern regions, where the worst situation is still found and, although some regions have recorded improvements, employment, levels of unemployment and inactivity remain high; the latter are over 32%, with peaks of more than 41% in Calabria and Sicily. In particular, the number of inactive people is also increasing in Molise and Basilicata, and in the latter region it seems that young people are strongly disheartened, considering that the growth of inactive people is also associated with a decrease in both employed and unemployed people. In general, it can be said that participation in the labour market is growing in Italy.
The data relating to NEETs, i.e., young people who are not engaged in education, employment or training, shows the dynamism of Veneto young people, who are in an advantageous position compared to the other Italian regions: in 2017, 106,765 15-29 year olds were NEETs, i.e., or 2.7% less than the previous year, and they represented 15.2% of Veneto young people in this age group, the second lowest level in Italy. First comes Trentino Alto Adige with 14.3% of NEETs, followed by

... dynamic with more

Fig. 5.5.1 -Young people 25-34 years old: unemployment rate in 2017 and percentage change 2017/2016 of the inactive countries by region (size of the bubble Idle rate) (*)



(*) Unemployment rate = (Job seekers / Labor Forces) x100
Inactivity rate 25-34 years = (Persons 25-34 years not belonging to the Labor / Population Forces 25-34 years) x100
Source: Elaborations by the Statistics Office of the Veneto Region on Istat data(*) Unemployment rate = (Job seekers / Labor Forces) x100

Valle d'Aosta and Lombardy, as shown in the map; Friuli is not far away, further confirming the previous analysis (see figure 5.5.1); the Italian average is 24.1%, with a slight decrease compared to the previous year. The southern regions are coloured red to indicate the alarming situation of their young people: Sicilians and Calabrians suffer more, since the share of NEETs is equal to 37.6% and 36.7% respectively.

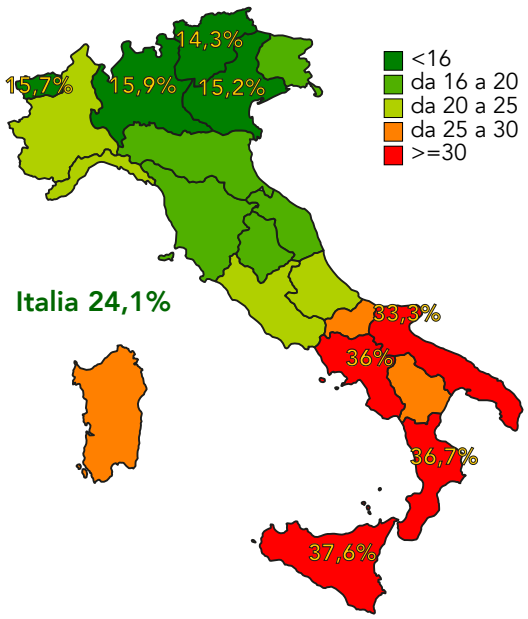
A certain dynamism of Veneto NEETs also emerges when looking at the annual percentage variations over the last ten years. The graph (figure 5.5.3) shows the movement of the Veneto curve with more significant peaks and troughs compared to the Italian average, which also reflects the strong stagnation of the labour market in southern Italy in recent years.

Dynamism is strong, however, it should also be noted that, although many improvements have been made in recent post-crisis years, there is still a lot of work to be done in this regard in Veneto: compared to ten years earlier, today there is 46.7% more of 15-29 year old NEETs in Veneto and 74% more in Emilia Romagna.

The performance in Veneto is also good for the school-work transition of our school leavers and graduates. According to the surveys carried out by ISTAT in 2015 on the school-work transition of those 2011 who completed school or graduated in 2011, Veneto records one of the best results at the national level. The Veneto graduates have a special status: among those employed in the 2011/2015 period, the percentage of those who found their first job within one year of leaving school is 60.4%, the highest percentage among all the Italian regions. Many are the graduates who find a job within a year. However,

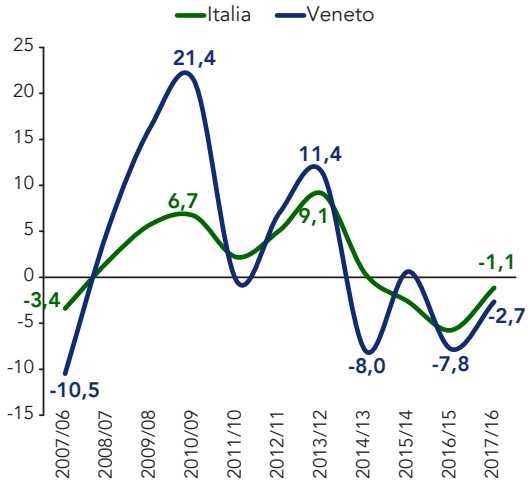
the other Italian regions, find work more often and more quickly, but it should also be pointed out that those in precarious employment are currently many more than ten years ago. In Veneto, more than a third (34%) of 20-34 year olds in 2017 were employed on a fixed-term contract, compared to 18.2% ten years earlier; Italy went from 21.6% in 2007 to 33.1% in 2017. Lombardy maintains the lowest share of precarious workers (a quarter), and the higher is recorded in the Marche region (42.8%). accept jobs that do not correspond to the skills they have gained, taking on a job for which a lower level of education than the one they possess is sufficient. In line with the national trend, the number of underpaid workers in the 15-24 age group in Veneto in 2017 was limited (10%), as the young people who had already completed their university studies were lower in number. After the age of 25,qualifications are lower, but with career advancement and increasing job performance, employees can improve their position. However, it will be interesting in the coming years to understand how this phenomenon has been amplified by the economic crisis; in other words, in future decades it will become clear whether today's young people are in a position to align their profession with the degree they have obtained, as it was for the young people of the past. For the time being, it can be highlighted that, compared to the data recorded in 2015 in Veneto, the share of over-qualified15-24 year olds and 25-34 year old working people has decreased by three and two percentage points respectively. In addition, the share of over-qualified working people with an upper secondary school qualification or university degree fell, the former from 8.4% to 6.9%, the latter from 40.4% to 38.3%; the latter also

Fig. 5.5.2 - Percentage of 15-29 year old NEETs (*) - Year 2017



((*) NEETs = young people Not engaged in Education, Employment or Training.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 5.5.3 - Percentage variations (*). Veneto and Italy - Years 2006:2017



(*) NEETs = young people Not engaged in Education, Employment or Training.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

gained four positions in the regional ranking the percentage of graduates increases and so does the percentage of young people forced to take up jobs that do not correspond to the qualification they achieved (17.6%). Veneto is historically a manufacturing region and therefore offers quite technical jobs which generally require formally certified mid-level skills; this situation often leads the working graduates to engage in jobs that do not fully reflect their skills. From the age of 35, professions are in line with qualifications and the proportion of underpaid workers drops rapidly to 6.3% among workers over 55.

... who find work quickly...

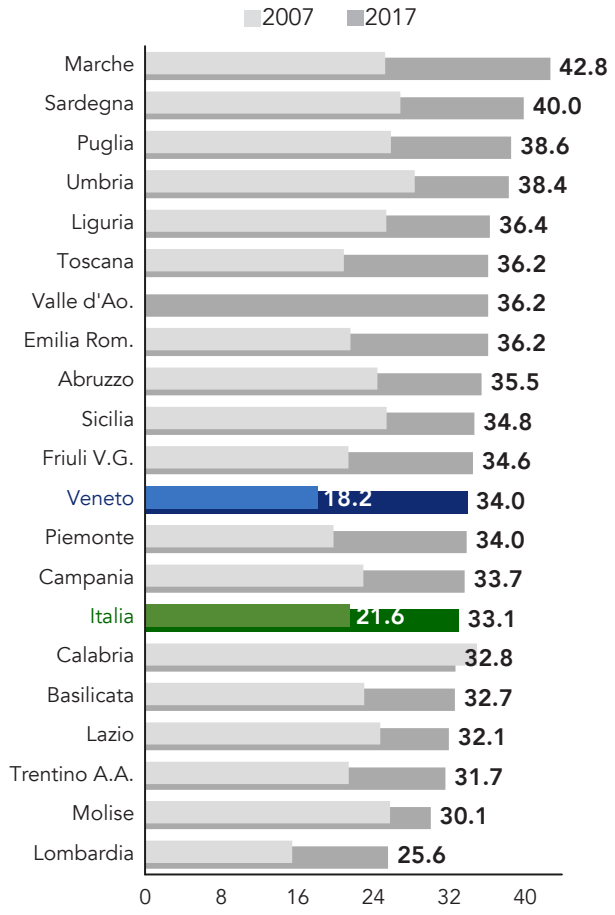
Being over-qualified is a phenomenon linked to age and working career: when entering the labour employment distress is underemployment. "Underemployed" is a worker who has a part-time employment contract but would like to work more hours and would be willing to do so within two weeks. This is a mismatch between the labour demand and supply: these workers are employed on a part-time basis, not by their choice but for external reasons, mainly due to unfavourable business needs. Underemployment is also linked to age and mainly affects young people up to 35 years of age, among whom the share of underemployed people in 2017 rose to 19.6% of total part-time employment in Veneto. In the next age group, including 35-44 year olds, the percentage drops to less than 14%. This can be traced back to the family situation: for people aged 35 to 44, part time work is more frequently a choice due to family needs than a constraint. Finally, graduates are less underemployed: 9.9% of part-time graduates are employed, compared to 13.5% of graduates who are underemployed.

...but much more precarious than before...

... and often over-qualified ...

Compared to the other regions, the labour market in Veneto shows a positive situation as regards underemployment of young people aged 25-34, recording, alongside high employment levels, low percentages of underemployment, whereas in terms of over-qualified employment, it reports a higher share than the national average. The region with the lowest share of 25-34 year olds in professions that are not in line

Fig. 5.5.4 – Percentage of 20-34 year olds with fixed-term employment. Years 2007 and 2017

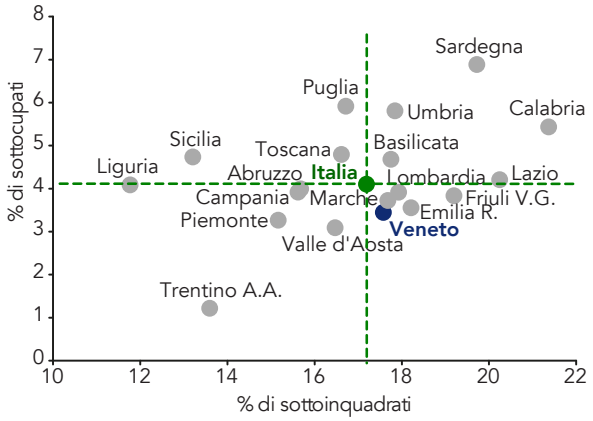


Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

with their qualifications is Liguria, whereas Trentino Alto Adige is the region with the least underemployed people. Overall, the worst conditions are found in Calabria and Sardinia the positive effects that a high level of education has on employment and thus on the situation of young people: the higher the level of education, the lower the unemployment rate. In 2017, the unemployment rate of 15-34 year olds in Veneto decreased as the person's level of education increased: it was equal to 20.5% for those with secondary education, and a half for those with upper secondary school qualification, and reached 8.3% for those with university education. At the average Italian level, the trend is the same and the differences are even more visible: from 29.3% of those who have lower secondary education to 20.3% of those with upper secondary education to 14.4% of university graduates.

... less underemployed than in other regions

Fig. 5.5.5 - Percentuale di occupati in età 25-34 anni sottoinquadrati e sottoccupati per regione (*) - Anno 2017



(*) Il dato del Molise dei sottoccupati non è statisticamente significativo, pertanto viene omesso.
I sottoccupati sono i lavoratori in part time che hanno dichiarato che vorrebbero lavorare più ore e sarebbero disponibili a farlo nelle due settimane successive. I sottoinquadrati sono quei lavoratori che possiedono un titolo di studio superiore a quello richiesto per svolgere una determinata professione.
Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati Istat

Higher qualifications are also associated with higher wages. It goes without saying that higher levels of education represent an advantage in terms of pay and a lower risk of unemployment and therefore also lower risk of poverty or social exclusion. Once again it is clear that education and school are an essential weapon against poverty and are an important springboard for the future of young people.

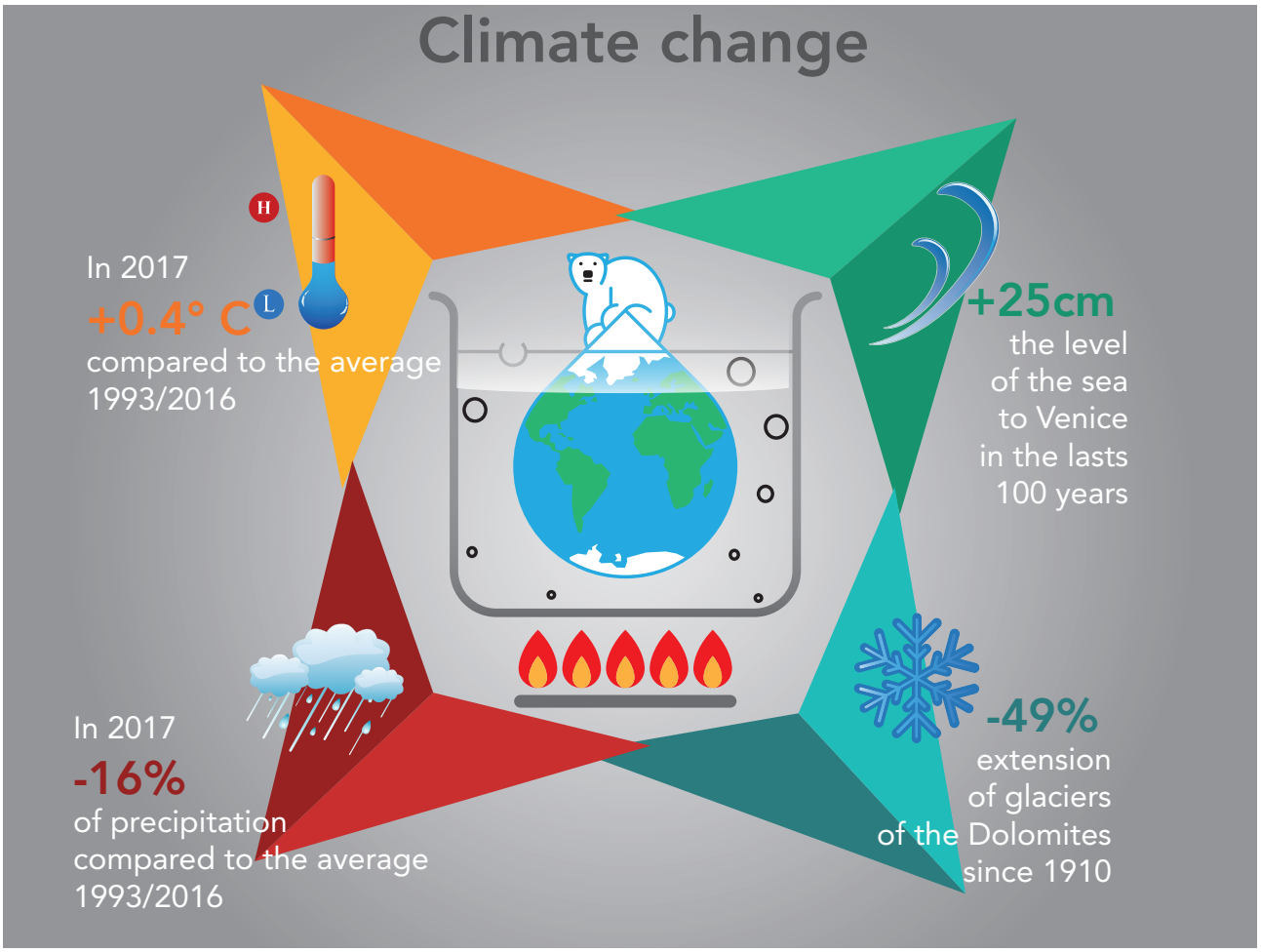
Studying reduces the risk of exclusion

In summary, young people in Veneto, compared to other Italian regions, find work more often and

more quickly and are also less underemployed; however, there are many precarious positions and those who adapt and accept jobs that do not correspond to the skills they achieved, taking on a profession requiring a lower qualification than that possessed, with repercussions on the remuneration and opportunities that a young person has to build their future as well. Moreover, even if there is a lower delay in their entering the world of labour compared to other regions, the discontinuity of contributions and low wages received during the first years of work, as well as the slower alignment of one's profession with the degree achieved compared to the past, will only penalise today's young people in their later life.
However, overall the data analysed in this sub-chapter leads us to consider the young people of Veneto as being in an advantageous position and less at risk of poverty or social exclusion in the future, both in economic and educational terms, compared to most Italian regions.

Chap. 6 - Climate change

The climate is made up of a set of weather conditions that characterise a certain region over a fairly long period of time, approximately at least 30 years. Changes in one or more of these conditions create changes in the climate itself. These variations can be natural or due to human activities.
While still observing a great natural variability, the comparison between current and historical data shows that the causes of climate change were purely natural until the last century, whereas in the last 70 years, the impact of anthropogenic activities has significantly intervened and, among other things, it has altered the greenhouse effect. This chapter analyses the situation in Veneto with regard to the trend of temperatures and precipitation from 1993 to 2017, the shrinkage of glaciers and the rise in sea level.
It emerged that 2017 was a warmer year than the average of the previous 25 years both in terms of minimum and maximum temperatures as well as in the averages themselves. From the precipitation point of view, 2017 recorded a rainfall deficit of -16%, compared to the 1993:2016 average.
As far as the sea level is concerned, the annual average values show a growing trend in Venice over the last 145 years [ISPRA, 2016] with an annual rate of 5.6 mm per year in recent years (1994:2016). Among the other effects of recent climate change recorded in Veneto, it is worth mentioning the reduction of the surface area and mass of the glaciers as well as the degradation of permafrost. The available data show that the glacial surface area of the Dolomites in the one hundred years from 1910 to 2009 reduced by 49%.



The word climate is defined as a set of weather conditions that characterise a certain region over a fairly long period of time, approximately at least 30 years. The elements that determine the climate of an area are temperature, atmospheric pressure, precipitation, humidity and winds, and the factors that influence it are the proximity to the sea, altitude, latitude, the presence of mountain ranges and vegetation. Different types of climate can be distinguished, the main ones being the equatorial, the desert, the Mediterranean, oceanic, continental and temperate.

Variations in one or more of the climate determining elements create changes in the climate itself. Climate change analysis begins with the study of a historical set of data that verifies its current situation and then proceeds with the search for the causes that determined it. The latter can be natural or due to human activities.

As for the natural aspects, the research carried out in Antarctica with the European programme EPICA (European Project for ice core drilling in Antarctica) at the Italian-French base of Concordia-Dome-C, has allowed, for example, to reconstruct the climate trend of the last 800,000 years, managing to estimate the variations in temperature and in the chemical composition of the atmosphere that the planet has endured over the millennia.

It has thus been discovered that, during this very long period of time, the earth has known eight glacial eras interspersed with eight warmer interglacial periods; also the carbon dioxide content in the air has varied, oscillating also between periods of higher and lower concentration. The main causes of these great climatic variations of the past are due to numerous interconnected factors and mechanisms, which are still not entirely clear, but essentially driven by changes in energy flows acting on the climate system, in particular those coming from the sun and reaching the Earth.

While still observing a great natural variability, the comparison between current and historical data shows that the causes of climate change were purely natural until the last century while, in the last 70 years, the impact of anthropogenic activities has significantly intervened and, among other things, it has altered the greenhouse effect. In particular, according to the 5th Report on Climate Change published by the Intergovernmental Panel on Climate Change (IPCC), global warming is unequivocal and, since 1950, many of the changes observed have been unprecedented. The atmosphere and the oceans have warmed up, the volume of snow and ice has decreased, sea levels have increased, and greenhouse gas concentrations have increased.

In the last 70 years climate change has been strongly influenced by mankind

With this in mind, we are addressing the issue of global action to mitigate the effects of climate change and its causes. As early as 1992, at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro, an international environmental treaty was drawn up called the United Nations Framework Convention on Climate Change, better known as the "Rio Agreements". The Treaty's objective was to reduce greenhouse gas emissions and thus limit global warming, although it did not impose mandatory limits on the signatories. In 1997, the first true agreement to impose these limits was signed, the Kyoto Protocol. Each year, the countries that signed the agreements meet at the "Conferences of the Parties" (COP) to analyse the progress made so far. In 2015, COP21 was held in Paris, where the Paris Agreement was ratified, under which countries committed themselves to help limit global warming to below 2°C compared to pre-industrial levels, continuing, if possible, their efforts to limit the increase in temperature to below 1.5°C. In 2016, COP22 was held in Marrakesh, however, there were no significant steps forward compared to Paris except to establish the requirement for participating countries to take stock of their CO2 emissions by the following year.

Finally, in 2017, COP23 was held in Bonn, chaired by the Fiji Islands; at it, however, the United States made a step backwards, and along with Canada, Australia and the EU refused to provide their own assessment data on CO2 emissions. In this sense, the lack of a sanctioning system against those who do not respect climate agreements has become apparent, and this represents a major weakness for the whole system.

To a more local context, Regione Veneto on 27 May 2016 signed the international "Subnational global climate leadership memorandum of understanding" (Under 2 MOU) drawn up in COP21.

The Under 2 MOU protocol is an agreement, born from a collaboration between California and the Federal State of Germany Baden-Württemberg aiming to unite nations, regions, provinces, cities and

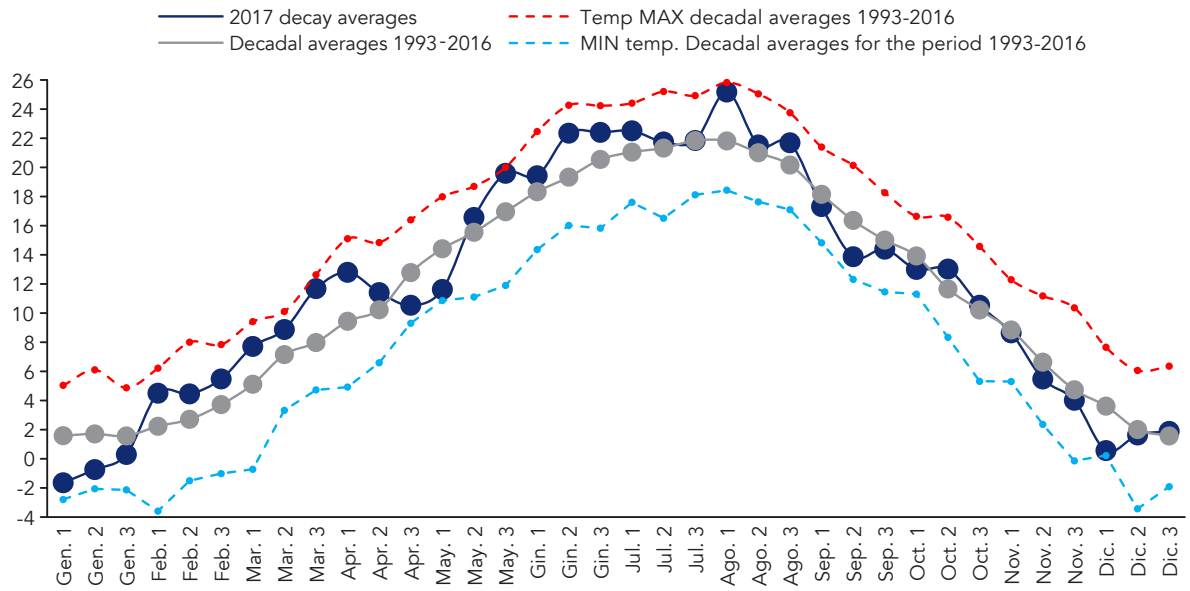
municipalities willing to commit themselves in a clear and lasting way to reduce greenhouse gas emissions and to support action against climate change. Currently, 205 local governments worldwide have signed the agreement, representing one billion and three hundred million people and 30,000 billion dollars of Gross Domestic Product, equal to 40% of the world economy.
The commitments undertaken by Regione Veneto with its subscription of the said Memorandum of Understanding will be implemented through the Regional Government Programme, with the Regional Economic and Financial Document (DEFR in the Italian acronym), as well as through sectoral planning tools such as the Regional Energy Plan, the Air Quality Plan, the Regional Transport Plan, the Rural Development Programme, the Regional Plan for the Management of Urban and Special Waste and other measures, in order to reduce greenhouse gas emissions and limit global warming to less than 2°C by the end of this century.
But how is the situation in Veneto? In the following paragraphs, we will attempt to paint a picture of the temperature and precipitation trends in 2017, compared to the average values recorded in the last 25 years, as well as the impact of climate change on the Veneto glaciers and on the Venice lagoon in the last century.

6.1 The temperature trend

This paragraph is dedicated to an analysis of the temperatures observed in 2017, through a comparison with the average of the last 25 years, to identify any anomalies. Firstly, from the trend for the average decadal temperatures (i.e., for periods of 10 days) of the averages, it emerges that 2017 began with a sharp drop in temperatures, which remained below the average for the entire month of January; in particular, the first ten days were particularly cold and in many stations in the mountain sector, the second ten days were colder than the first ten. January was therefore one of the coldest months in the last 25 years.
From the beginning of February to mid-April, decadal values remained steadily above the norm, with particularly high values between the end of March and the beginning of April.
The average temperatures for the 1 February - 10 April period were among the highest since 1993, exceeded only by those of the equivalent period in 2014 and similar to those observed in 2007, while in the Dolomitic sector were the hottest ever.
Since 19 April, the thermal situation has changed abruptly: in fact, there has been a marked drop in temperatures and, between 19 to 22 April, various stations on the plains and foothills also recorded minimum temperatures below or close to 0 °C. The average temperatures for the third ten days of April and the first ten days of May were also significantly lower than the twenty-year average, to the point that these twenty days were the second coldest in the twenty-five years after the same period in 1997.
From the second ten days of May to the end of August there was a further warm phase with temperatures permanently above or close to the average (second and third ten days of July). In this period, extreme temperature values were not exceeded; however, overall the entire period was one of the hottest in the last 25 years, exceeded only by the same period in 2003 and similar to 2015.
The year then closed with two cold phases (below average values) that affected the periods from the beginning of September to the first ten days of October and from November to the first ten days of December.
The trend of annual average temperatures in Veneto in the 1993-2017 period stems from the calculation, for each year, of the weighted average of the average annual temperatures recorded in the control units through 96 daily surveys (one every 15 minutes). The values of the annual weighted average are obtained by dividing the 134 ARPAV thermometric stations into 8 altimetric bands and allocating the average station values present on each altimetric band a weight that is proportional to the regional area affected by the respective altimetric band.
2017 showed thermal valu
The warmest years of the period were (in descending order) 2014, 2015 and 2011. In general, from 2007 to 2017, all years except 2010 had thermal values above or equal to the average (10 years out of 11), while in the previous 14-year period there were 4 above average values (2003, 2002, 2000 and 1994) and 10 years with lower temperatures. The coldest years in the series were (in ascending order) 1996, 1995, 2005 and 1993.
Going into the detail of the altimetric bands of Veneto, it is interesting to analyse the distribution of the annual temperature average of the averages observed in the different sectors of

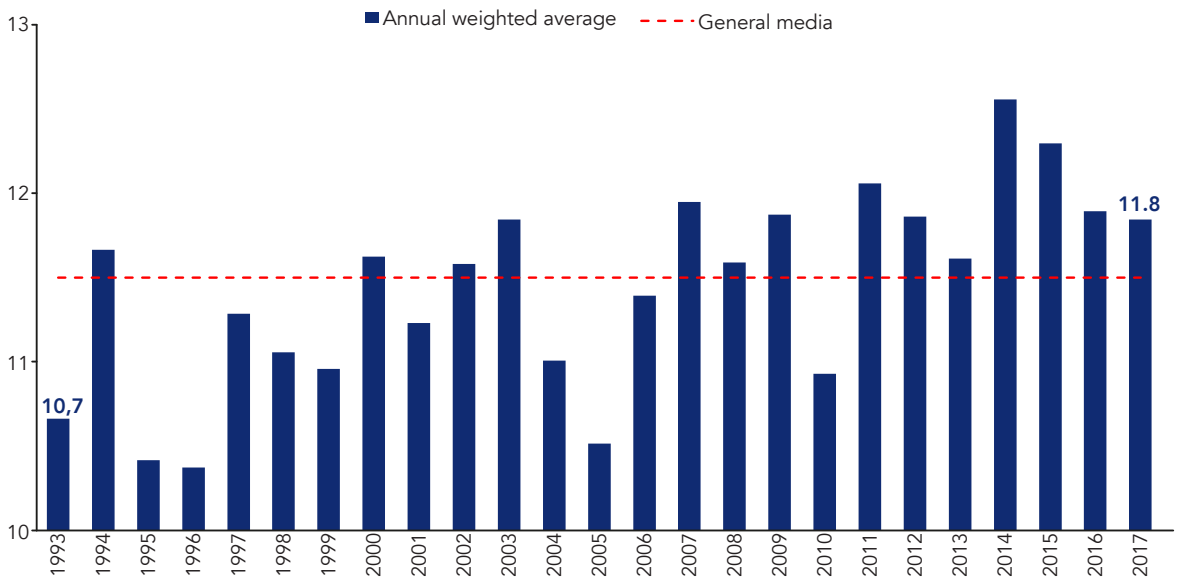
2017 was warmer than average

Fig.6.1.1 - **Average decadal temperatures of the averages. Veneto - Year 2017**



Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.1.2 - **Average temperature of the averages by year.**



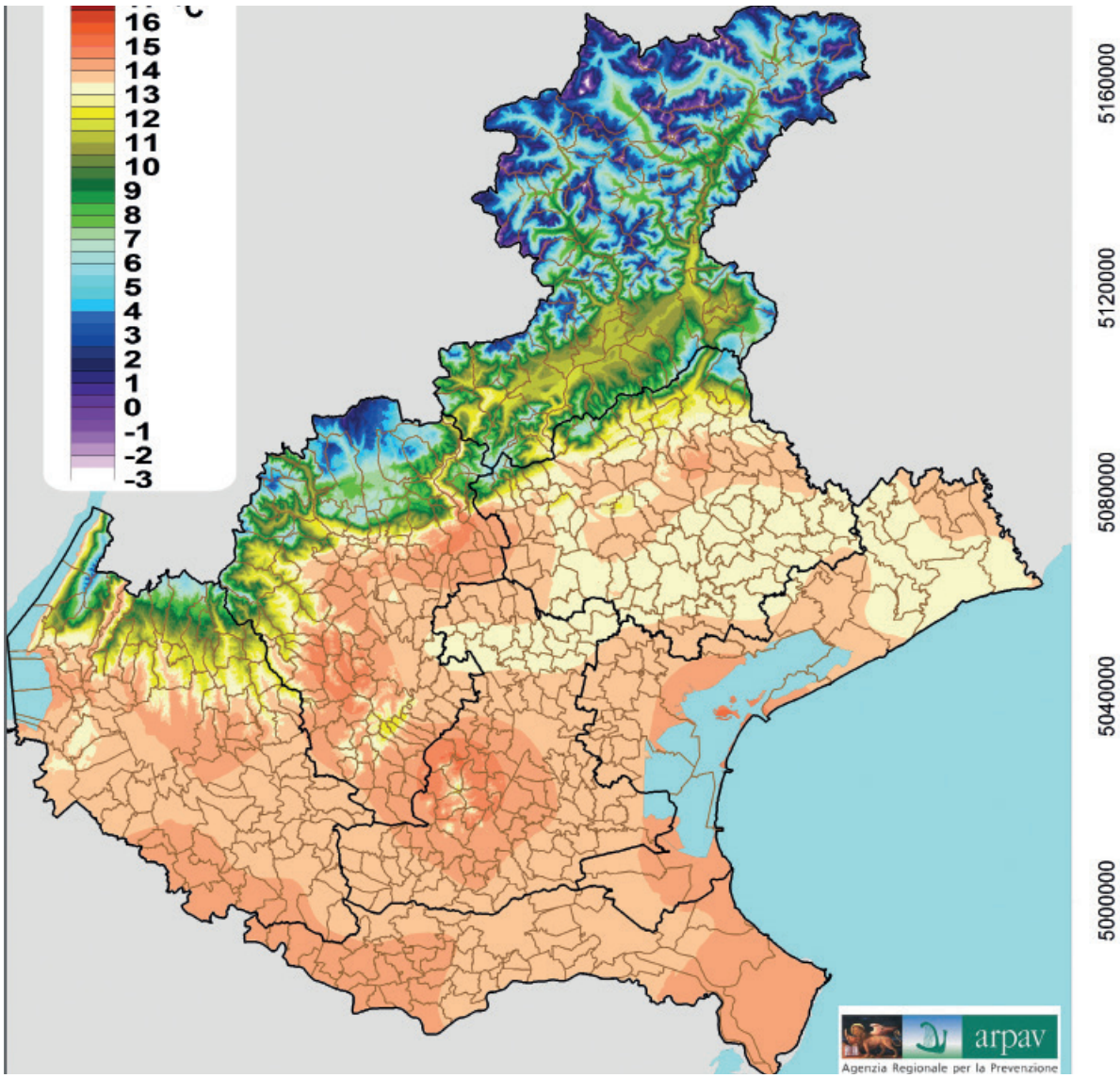
Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

the region. This was done through the spatialisation (ordinary kriging[1]) of the measurements made by 134 thermometric stations, related to the land level by using a digital model of the land with a resolution of 100 m x 100 m. The result is shown in the thematic map below and refers to 2017. The light yellow colour on the plain indicates average annual temperatures of 13.0÷13.5 °C (north-eastern plain and southern Garda), the light apricot colour indicates values of 13.5÷14.0 °C (mid-Polesine and central plain excluding the Berici and Euganean Hills) and the darker shade indicates values of 14,0÷14,5 °C (southern coast, lower Polesine, southern plain and piedmont area)

In Val Belluna at altitudes varying between 250-400 m a.s.l. the temperature values vary between

1 Kriging is a regression method used in spatial analysis (geostatistics) that can be used to interpolate a size in space, minimising the mean square error.

Fig.6.1.3 - Average temperatures of the averages by altimetric area. Veneto - Year 2017

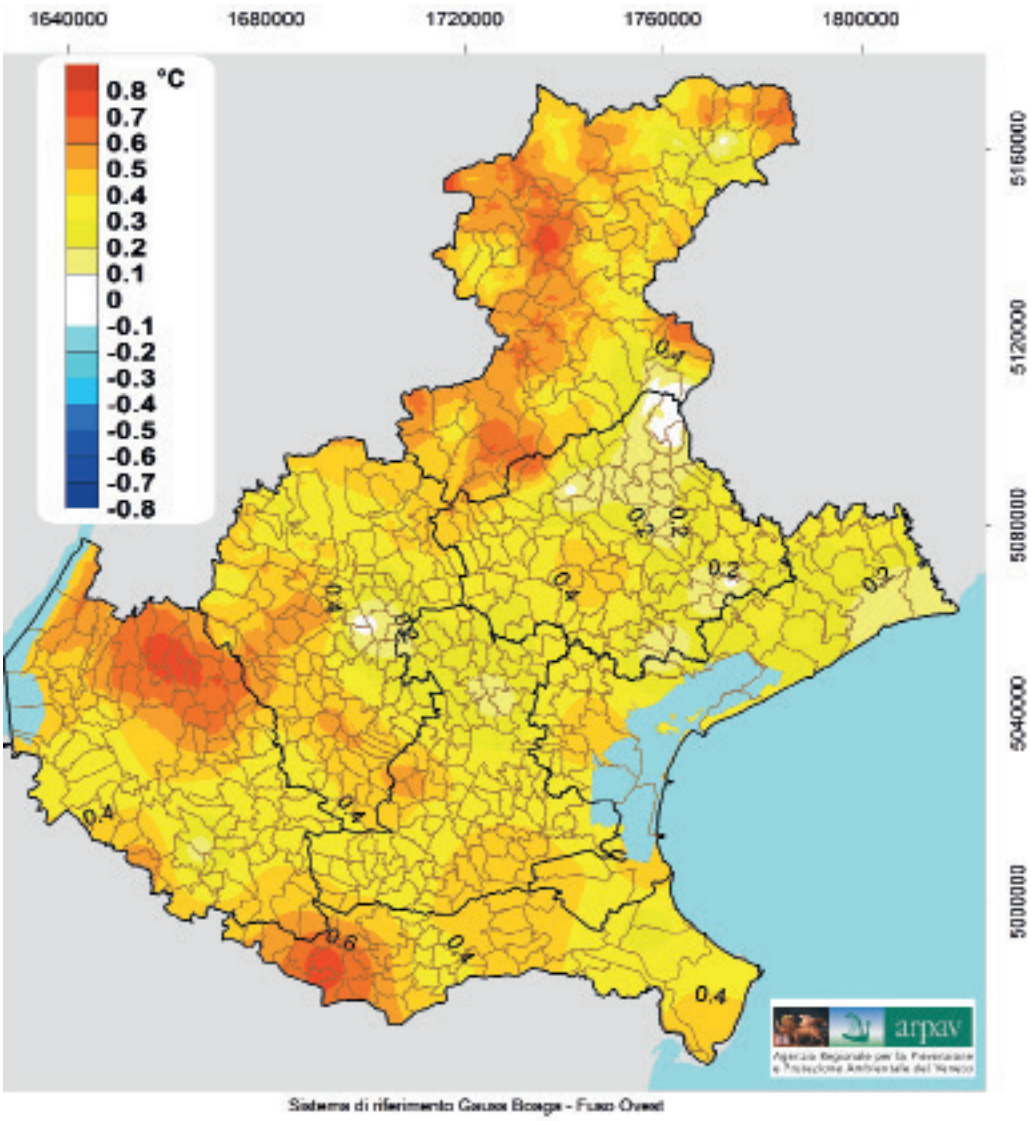


Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

10.7 and 11.0 °C, in Asiago (1010 m a.s.l.) the annual average is 7.0 °C, in Cortina d'Ampezzo (1270 m a.s.l.) it is 7.1 °C and in Faloria (2240 m a.s.l.) it is 2.4 °C. Another interesting analysis is that of the distribution in Veneto of the differences between the average temperature in 2017 compared to the average between 1993-2016. Almost everywhere these differences are positive, i.e., the average temperatures of the averages for 2017 are higher than the twenty-five year average. These differences on the plain are of the order of 0.2÷0.5 °C, higher values (0.4÷0.8 °C) are located on the upper Polesine. Similar differences (0.4÷0.8 °C) can be observed in the western Pre-Alps and in large areas of western and northern Belluno.

In summary, it should be noted that 2017 was a warmer year than the average of the previous 25 years in both minimum and maximum temperatures as well as in the averages themselves. This deviation from the 25-year values was widespread in all the

Fig.6.1.4 - Differences in the average temperature of the averages for 2017 with the 1993:2016 average - Veneto



Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Tab.6.1.1 – The average, minimum and maximum temperatures in 2017 and in the period 1993:2016 by altimetric band

Altimetric band (meters a.s.l.)	Surface area (km2)	No. stations	Media 1993-2016			Anno 2017		
			Max. T.	Average T	T. min.	Max. T.	Max. T.	Max. T.
Over 1999	559	4	6.1	2.2	-0.9	6.8	2.9	-0.5
1500-1999	1.133	6	8.6	4.3	0.8	9.3	4.8	1.3
1000-1499	1.687	20	11.8	6.6	2.5	12.4	7.1	2.8
500-999	1.594	21	14.7	9.4	5.3	15.1	9.8	5.7
200-499	1.440	15	17.1	11.8	7.5	17.7	12.3	7.8
100-199	1.090	11	18.7	13.4	8.7	19.1	13.8	9.0
50-99	1.337	10	19.0	13.6	8.5	19.3	13.9	8.7
Below 50	9.570	48	18.8	13.4	8.5	19.4	13.8	8.7
Weighted average in Veneto	18.410	135	16.7	11.4	6.9	17.2	11.8	7.1

Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

altimetric bands of the region. The following page shows graphs indicating the seasonal average temperatures of the averages for the 1993-2017 period and maps showing the differences (expressed in °C) between the 2017 seasonal values and the equivalent average values for the 1993-2016 period.

The highest temperatures of 2017 were widespread in all altimetric bands

should be noted that the meteorological seasons consider complete quarters (e.g., spring: March-April-May) and that winter includes December of the eleventh year and January and February of the following year was markedly warmer than the average, with temperatures only lower than those of spring 2007 and 2001; the differences with the average were particularly marked in the northern Alpine sector. The summer of 2017 was also warmer than in the 1993-2016 period, ranking fourth after 2003, 2015 and 2012.

As far as autumn is concerned, 2017 was characterised by temperatures about 0.5÷0.6 °C lower than average.

A warmer 2017 but with a colder autumn and an average winter

These differences with the average were more marked the plains and localities at the bottom of valleys and less accentuated at high altitudes and in the central-western Pre-Alps.

Finally, with regard to winter (December 2016, January and February 2017) temperatures were in line with the average for the period. It is interesting to note that the thermal trend is clearly differentiated between the plains, with lower than average values, and mountains, with generally much higher values.

Comparing the average temperatures for each month in the 1993:2016 period with those of 2017, the average temperatures for the latter are fond to be low in January, high in March and it is evident thermal inversion conditions in October, with higher than average values at high altitudes and lower than the average on plains.

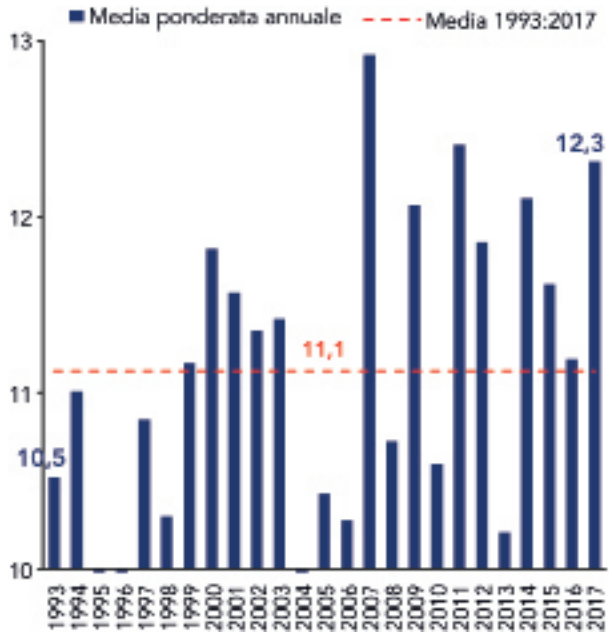
6.2 Rainfall

Another fundamental element that characterises the climate is rainfall. ARPAV estimates annual rainfall through the spatialisation of the measurements carried out by about 160 rainfall stations located throughout the regional. Overall, in 2017 it is estimated that 932 mm of water fell in Veneto, which is equivalent to about 17,170 million m3 of water.

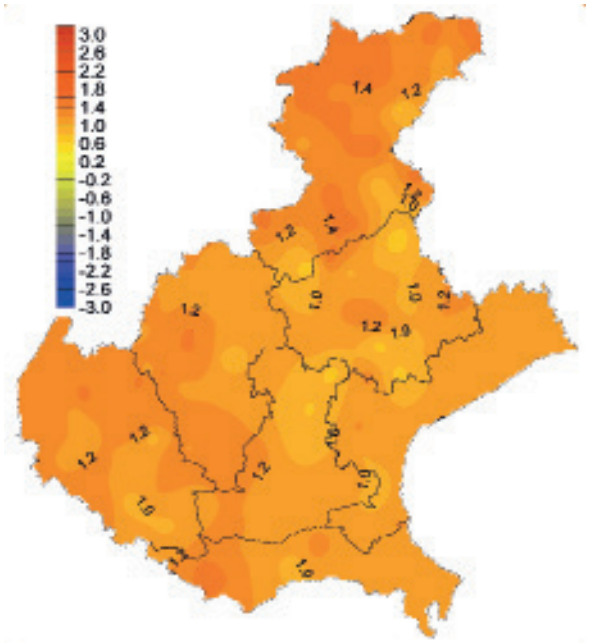
The average annual rainfall for the 1993:2016 pe-

Fig.6.1.5 - Average temperature of spring averages* in Veneto

Trends for 1993:2017



Differences (degrees Celsius) between 2007 and the 1993:2016

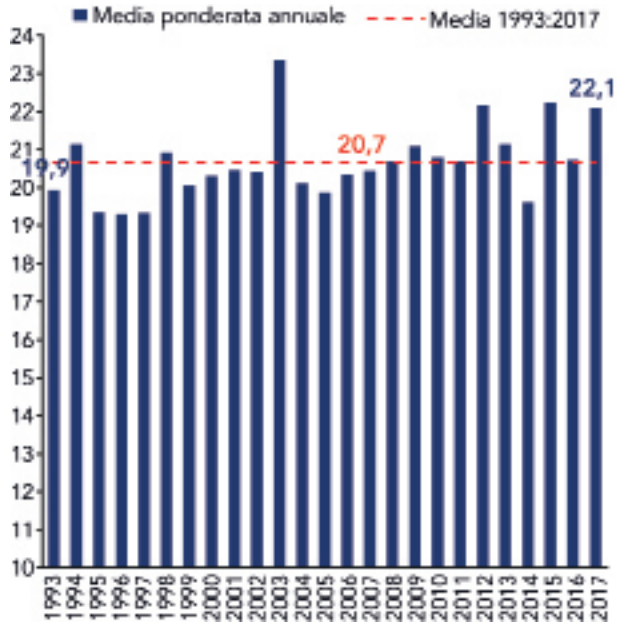


Differences (degrees Celsius) between 2017 and the 1993:

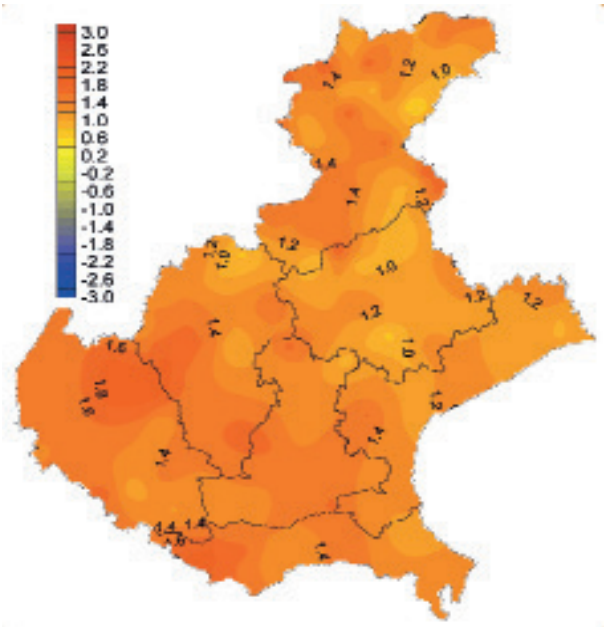
(*) Veneto weighted average of the average values recorded in the 134 thermal stations Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.1.6 - Average temperature of summer averages * in Veneto

Trends for 1993:2017



Differences (degrees Celsius) between 2007 and the 1993:2016 average

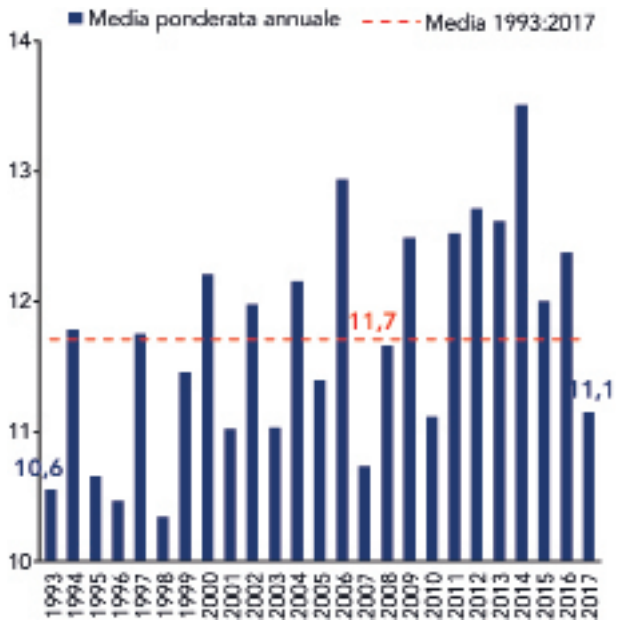


Differences (degrees Celsius) between 2017 and the 1993:2016 average

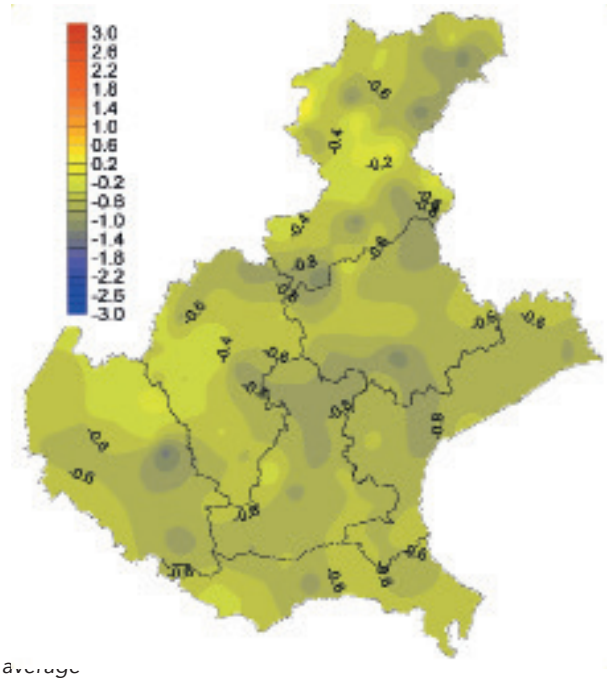
(*) Veneto weighted average of the average values recorded in the 134 thermal stations Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.1.7 - Average temperature of autumn averages* in Veneto

Trends for 1993:2017



Differences (degrees Celsius) between 2007 and the 1993:2016 average

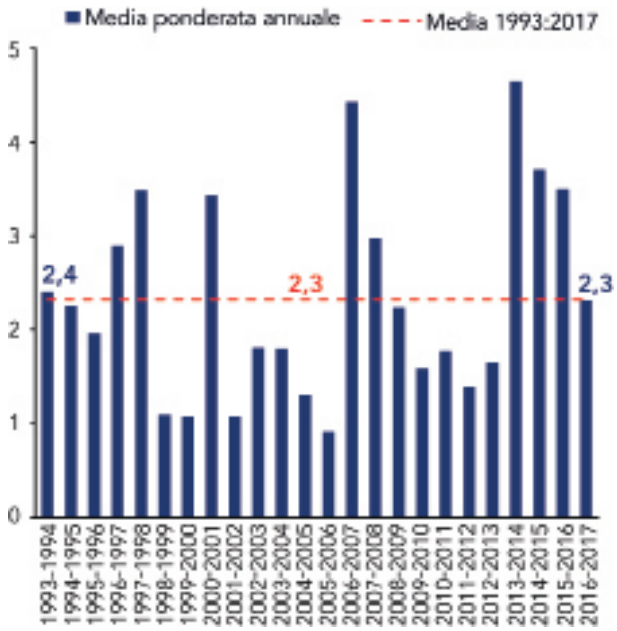


Differences (degrees Celsius) between 2017 and the 1993:2016 average

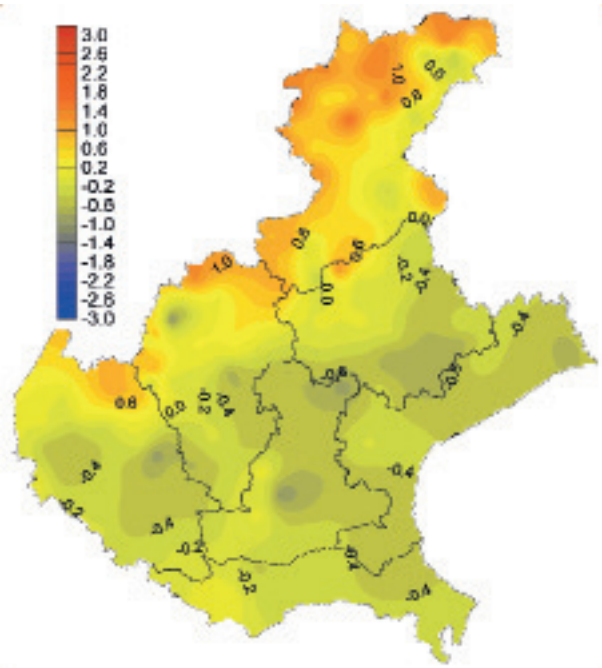
(*) Veneto weighted average of the average values recorded in the 134 thermal stations Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.1.8 - Average temperature of winter averages* in Veneto

Trends for 1993:2017



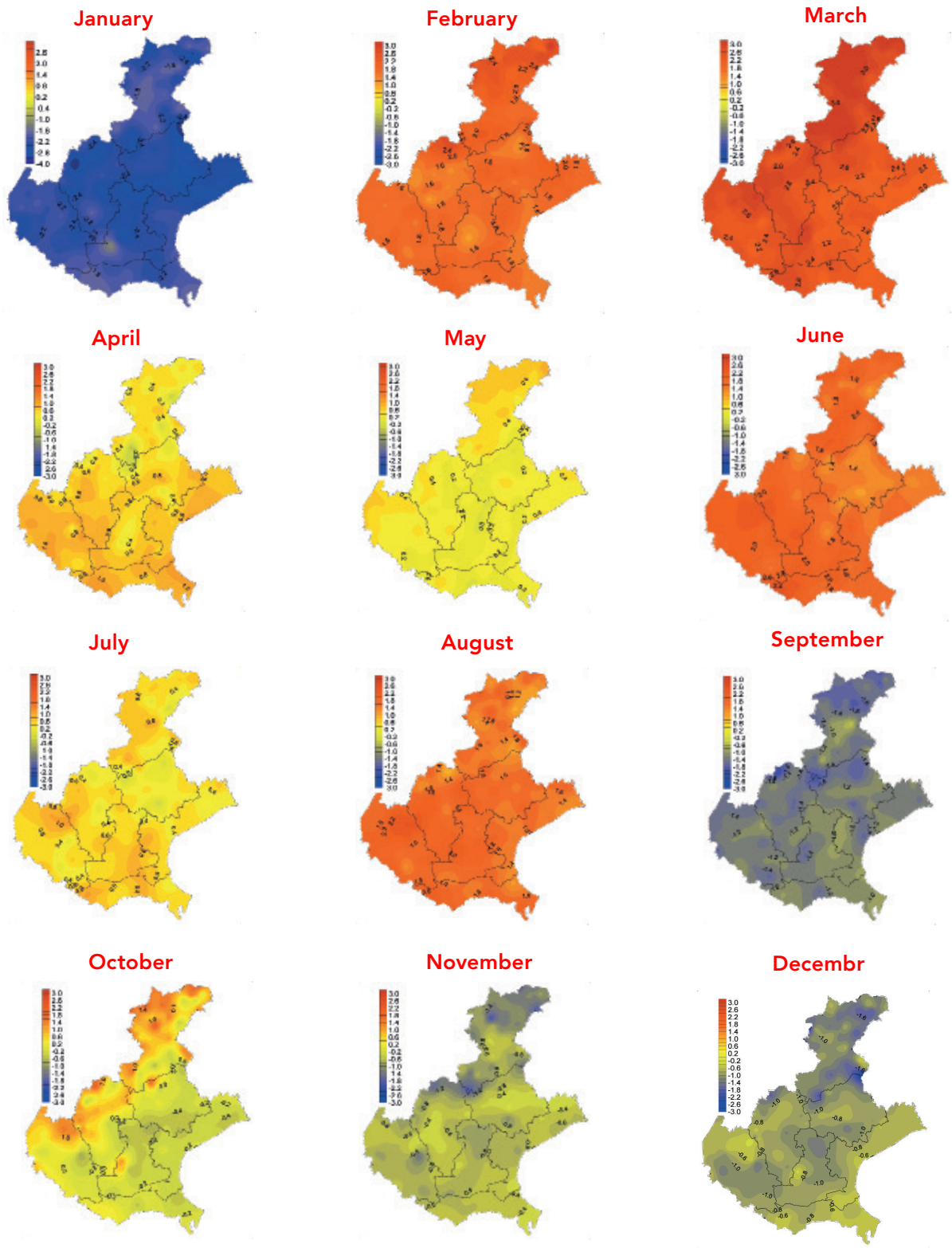
Differences (degrees Celsius) between 2007 and the 1993:2016 average



Differences (degrees Celsius) between 2017 and the 1993:2016 a

(*) Veneto weighted average of the average values recorded in the 134 thermal stations Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.1.9 - Differences between the average monthly temperatures in 2017 and the average temperature of 1993-2016 expressed in degrees Celsius



Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

riod is estimated at about 1,106 mm and therefore 2017 recorded a rainfall deficit of -16% compared to the average. Although the last year was below the average, it was not a special case since, in the period considered, there were nine years with lower rainfall than at present, particularly in 2015 when the absolute minimum was recorded.
The maximum rainfall is found in the central-eastern Pre-Alps and in the central-southern Dolomites with absolute maximums of 1,996 mm on Mount Grappa (Seren del Grappa, Belluno province), 1,774 mm at Rifugio la Guardia (Recoaro Terme, Vicenza province) and 1,739 mm at Soffranco (Longarone, Belluno province).
The minimum annual rainfall was recorded on the central southern plain at the stations of Balduina (Sant'Urbano, Rovigo province) with 452 mm, San Bellino (Rovigo province) with 490 mm and Sant'Elena (Padua province) with 499 mm.

Fig.6.2.1 – Estimated annual rainfall in Veneto (millimetres) - Years 1993:2017

Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

The isoiete map[2] below describes the distribution of rainfall in mm that fell in Veneto in 2017 and derives, in the case of temperatures, from the spatialisation with the ordinary Kriging method of the data recorded by about 160 ARPAV rainfall stations.

Il 2017 presenta un deficit pluviometrico del 16% rispetto alla media

As mentioned above, 2017 was a year characterised by a general lack of precipitation. This pluviometric deficit was unevenly distributed over the regional territory, with some areas with normal rainfall (Po River Delta, Portogruaro area, Longarone area and part of Cadore) and areas with a marked deficit (central-southern Padua province, central Vicenza and Verona province areas).
The two maps of Veneto below show the difference, expressed in mm and percentages, of rainfall in 2017 compared to the 1993:2016 average.
The average rainfall analysis in Veneto by hydrographic basin from 1993 to 2017 shows that in the last year, the most marked rainfall deficits were found in the basins of the Adige river (-28% compared to the average), the Brenta river (-24%), the Fissero-Tartaro Canal Bianco waterway (-22%), the Draining Basin in the Venice Lagoon and the Po river (-16%).
On the contrary, the Piave basin and the eastern Veneto basins had rainfall only slightly lower than the average, if not average. The rainfall deficit in 2017 is also confirmed at a seasonal level[3] although, as already seen for the annual averages, differences between areas are found. In particular, although rainfall deficit conditions clearly prevail in spring, there are localised situations of normal rainfall (particularly in the north-eastern Belluno area); in summer, some areas of the Belluno and Treviso areas have surplus rainfall compared to the norm and, finally, autumn rainfall on the southern plain and coast is above average.
The monthly detail confirms the uneven rainfall trend in 2017 compared to the average levels of the 1993:2016 reference period. In particular, rainfall

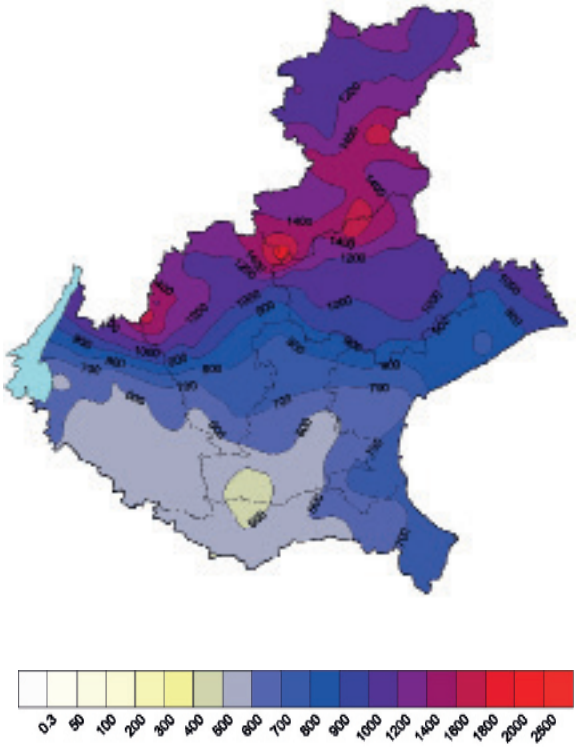
2 Isoietes are closed curves that indicate areas affected by the same amount of precipitation.
In the rainfall map the isoietes represent the distribution of rain over time in a given area
3 The meteorological seasons include full quarters (e.g., spring months of March-April-May) and winter includes December of the year in question, January and February of the following year

was significantly lower than the average in January, March, May, August and October, markedly higher in February, September and December and, finally, on average in April, June, July and November.

The rising sea level in Venice

The warming of the atmosphere and seas, over the last 150 years, has caused a progressive and general rise in the average sea and ocean level. The phenomenon, also known as eustasy, is due to various causes including two dominant factors: the thermal expansion of the oceans, which as a result of the increase in their temperature increase in volume, and the contribution of new liquid mass resulting from the fusion of the continental ice caps (Greenland and Antarctica above all). From 1901 to 2010 the sea level

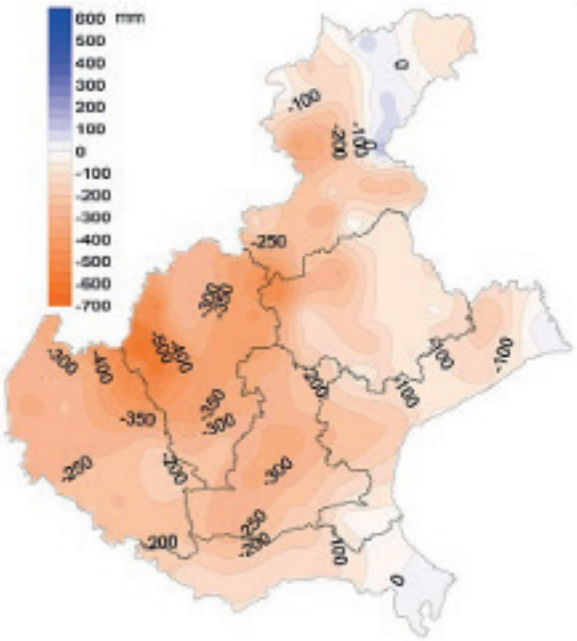
Fig.6.2.2 – Distribution of rainfall in Veneto (millimetres) - Year 2017



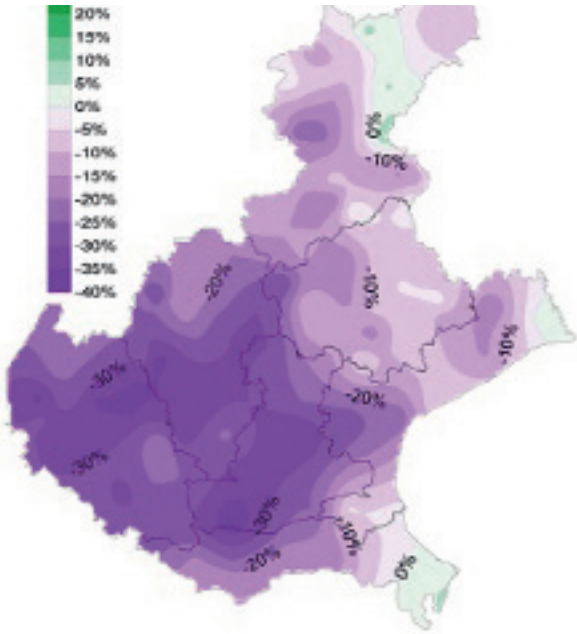
Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.2.3 – Difference in rainfall in 2017 compared with the average for 1993:2016 (millimetres and % values))

Millimetres



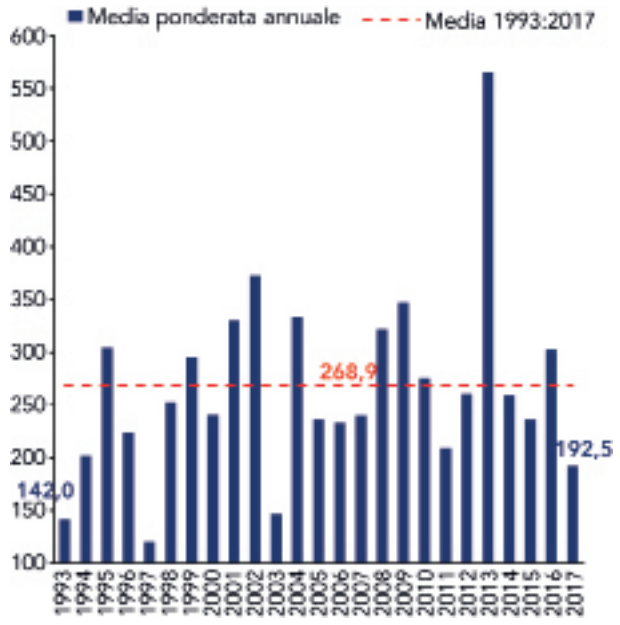
Percentage values



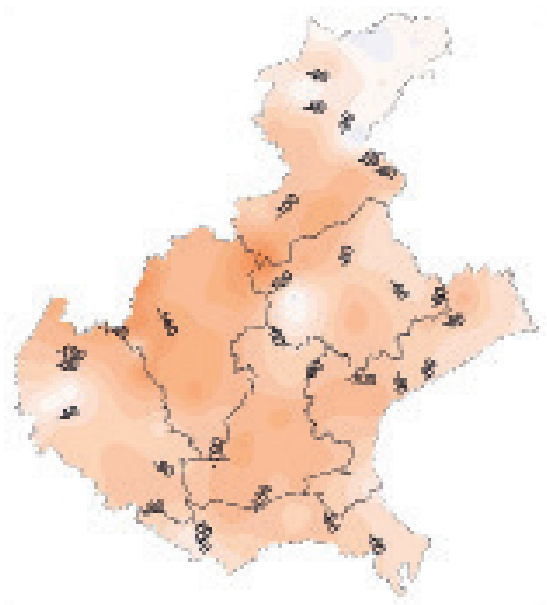
Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.2.4 - Estimated spring rainfall in Veneto (millimetres fallen)

Trends for 1993: 2017



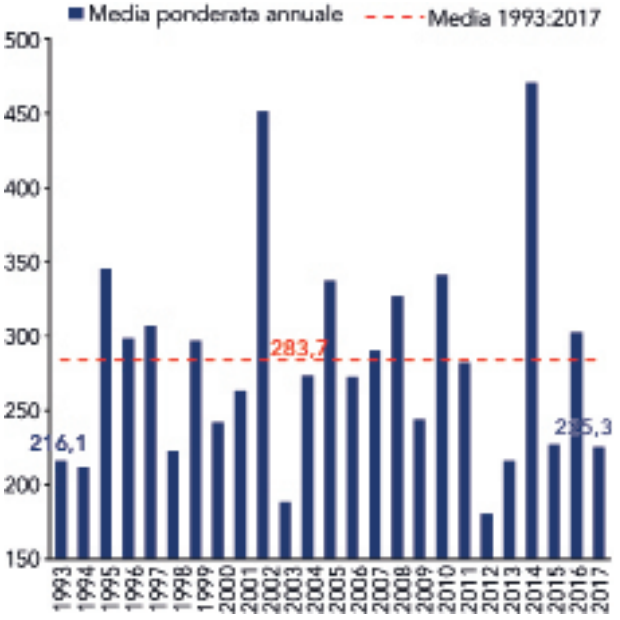
Differences (in millimetres) between 2017 and the 1993:2016 average



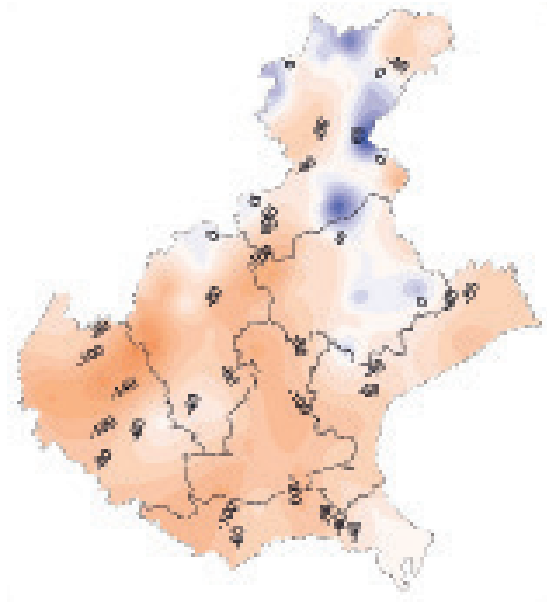
Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.2.5 - Estimated spring rainfall in Veneto (millimetres fallen)

Trends for 1993: 2017



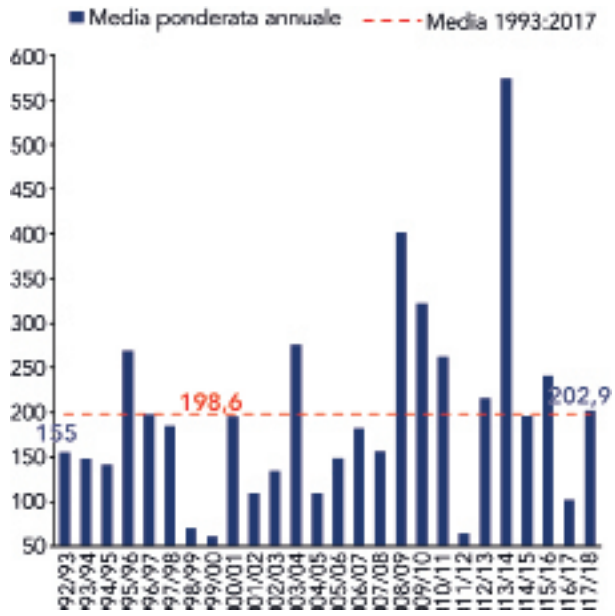
Differences (in millimetres) between 2017 and the 1993:2016 average



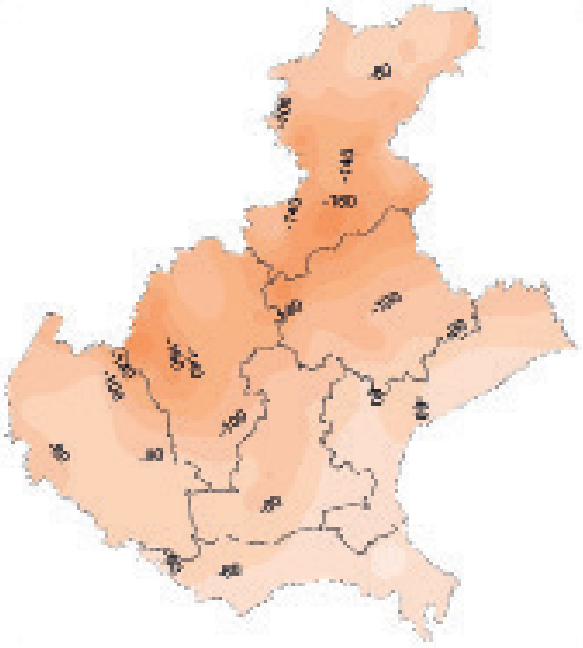
Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Fig.6.2.6 - Estimated autumn rainfall in Veneto (millimetres fallen))

Trends for 1993: 2017



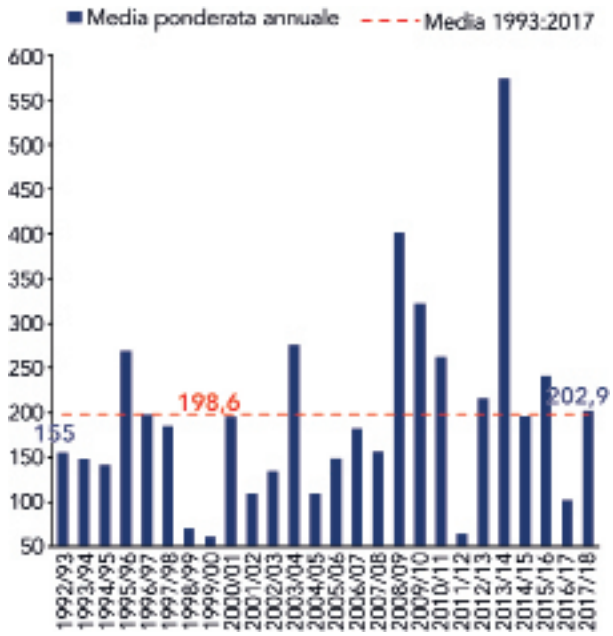
Differences (in millimetres) between 2017 and the 1993:2016 average



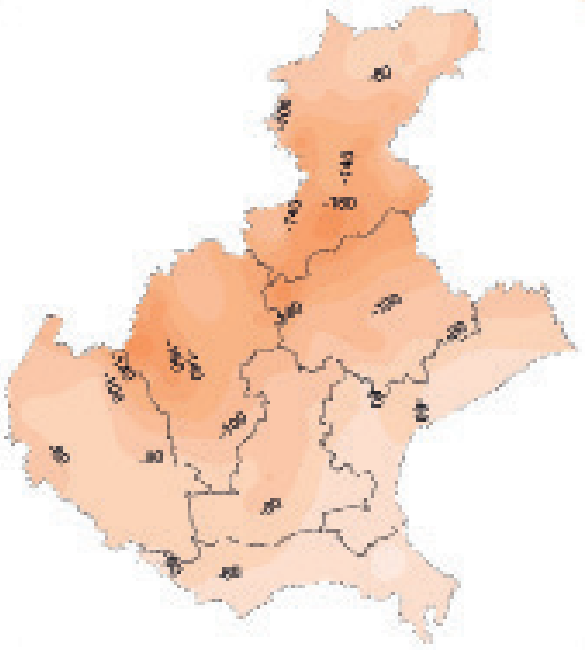
Fonte:Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati ARPAV

Fig.6.2.7 - Stima delle precipitazioni invernali in Veneto (millimetri caduti)

Trends for 1993: 2017



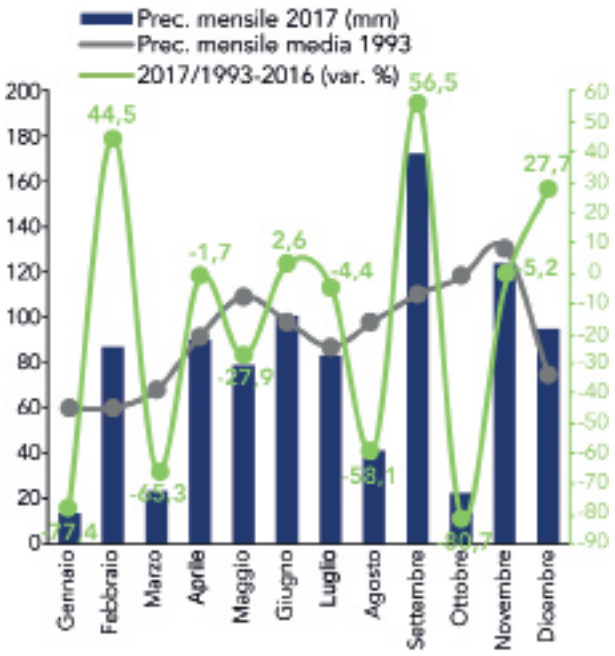
Differences (in millimetres) between 2017 and the 1993:2016 average



Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

Report on climate change by the IPCC (Intergovernmental
Panel on Climate Change, 2014), in the last century, from 1901 to 2010, the average global sea level increased by 0.19 m (+/- 0.02 m) corresponding to an average rate of 1.7 mm/year (+/- 0.2 m). Recent studies, including those carried out using satellite data, have shown that this increase is accelerating to rates that are even higher than 3 mm/year. The main causes of this acceleration are probably due to the increase in the amount of dissolved continental ice over the last 25 years, especially in Greenland. According to one of the latest reports

Fig.6.2.8 – Estimate of monthly rainfall in Veneto (in millimetres) - Year 2017 and comparison with the 1993:2016 average of each month



Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

6.3 The effects of climate change

Among the most evident and significant effects related to the current phase of climate change, the rise of the average sea level and the reduction of glaciers are some important signs closely related to the changes that directly affect the by the European Environment Agency (EEA), the average annual ice loss in Greenland has increased from about 34 Gt/year in the 1992-2001 period to about 215 Gt/year in the 2002/2011 period, contributing to raising global sea levels by about 8 mm between 1992 and 2012 (EEA, 2016).

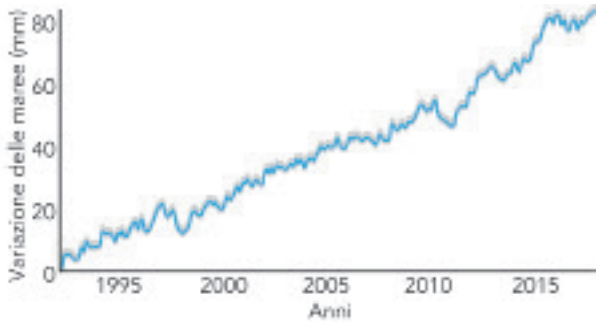
The Mediterranean and therefore the Italian seas have also experienced an increase in their average level over the last century, comparable to that recorded on a global scale. Based on data from CNR-ISMAR (National Research Council Institute of Marine Sciences), the average rate of sea rise recorded from 1890 to 2016 in Trieste, and similar to that recorded in Genoa, has been estimated at 1.4 mm/year but with a significant increase up to over 3 mm/year in the 1994:2016 period.

According to the latest From 1901 to 2010 the sea level rose by 19 cm!

In Veneto, the historical tide gauge station of reference is that of Venezia Punta Salute.

The annual average values graphically represented in Fig. 6.3.2 show the increasing trend of the mean sea level (m.s.l.) observed in Venice over the last 145 years [ISPRA, 2016]. The level data refers to the reference plan called Zero Mareografico (zero tidal level) of Punta della Salute (ZMPS in the Italian acronym), which has been adopted as a conventional reference for the measurement of tidal levels

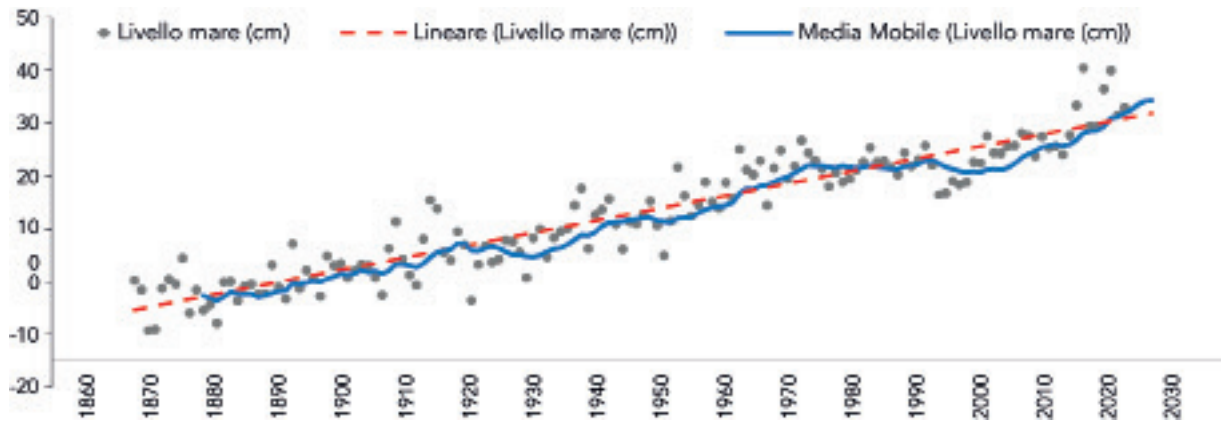
Fig. 6.3.1 - Variation of the mean sea level (in millimetres) on a global scale - Years 1993:2017



Source: Processing of data from NASA Goddard Space Flight Center by the Statistics Office of Regione Veneto

throughout the Venice Lagoon, calculated by averaging 25 years of observations, from 1885 to 1909. The trend of the m.s.l. shows a growth that is always homogeneous over time but is particularly marked in certain periods, while in other periods it is almost zero or even slightly negative, with an average growth rate, valid for the entire period 1872-2016, equal to 2.5 mm/year (over 25 cm in 100 years).
This growth rate is therefore significantly higher than the global average and almost double that of Trieste. The main reason for this difference is attributable to the phenomenon of subsidence, a characteristic feature of the Venice area, which consists of the progressive lowering of the land surface, i.e., the subsidence of the land due to the compaction of the underlying soil layers, both for natural and anthropogenic causes (e.g., extraction of gas, water, etc.).
An analysis of the last twenty years of the series shows that, while remaining within a marked inter-annual variability, even the Venice mareographic station has recorded a trend and significant increase in the growth rate estimated at about 5.6 mm/year in the 1994:2016 period, a value that, especially for Venice, is particularly important and

Fig. 6.3.2 – **Mean sea level trend in Venice - Punta della Salute - Years 1872:2016**



Source: Processing of ISPRA data by ARPAV

Glaciers and permafrost[4]

Among the main effects of the recent climate changes recorded in Veneto is the reduction in the surface area and mass of its glaciers as well as the degradation of permafrost.
As with all Alpine glaciers, the receding phase of the Veneto glaciers has lasted since the end of the Small Ice Age (about 1850) and has accelerated since about 1980 due to recent climate changes.

The Dolomite glaciers have shrunk by 49% since 1910

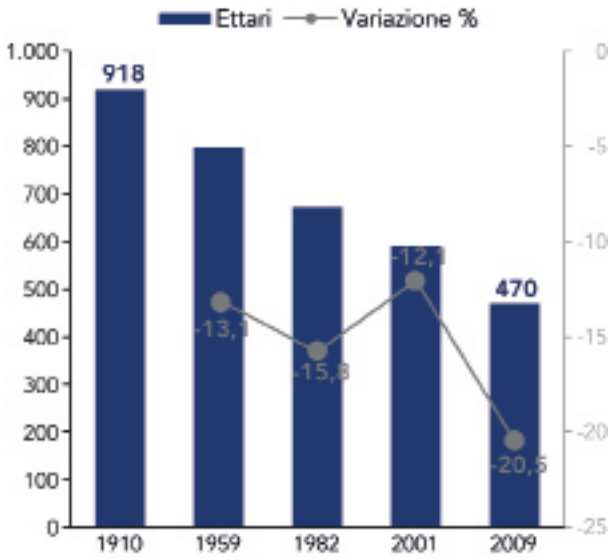
The glacialism of Veneto, with a total area of 3.29 km2, represents just under 1% of the entire Italian glacial surface (data refers to 2009). The forty-eight Veneto glaciers are distributed in eleven mountain groups: Cristallo, Pale di San Martino, Marmolada, Civetta, Pelmo, Tofane, Antelao, Marmarole, Sorapis, Cadini and Popera. The Sorapiss group is the most glaciated of these with seven glacial formations for a total of 0.59 km2. Mountain ranges such as Pelmo, Tofane and Marmolada have a limited glacialism of a few small glaciers, most of which are covered with debris and therefore have borders that are difficult to identify. The ARPAV database contains information on the surface of the Dolomite glaciers from 1888 to 2009. It provides an overview

4 The soil in cold climates, perpetually frozen at depth.

of the trend over the last 100 years. The analysis of the twenty-seven systems for which historical data is available, representing 72% of the glacialised surface area of the Dolomites, was carried out considering the five most comprehensive campaigns: Marinelli (1910), Comitato Glaciologico Italiano (1956/59), World Glacier Inventory 1980/82, ARPAV (2001) and ARPAV (2009) (Fig. 6.3.3).
The available data show that the glacial surface area of the Dolomites in the one hundred years from 1910 to 2009
reduced by 49%. However, the phase of deglaciation acceleration
that has characterised the last decades is also evident: in fact, the reduction in the 70 years from 1910 to 1980 was 27%, and in the 30 years from 1980 to 2009 it increased by a further 30%.
Recent climate changes have also accelerated the permafrost degradation process, which has resulted in a reduction of permafrost areas and an increase in the thickness of the active layer. This has caused an increase in the susceptibility of high-altitude regions to instability. Many rock mass collapses and debris flow phenomena[5] that have affected Veneto in recent years seem to be due, at least as a contributing cause, to permafrost degradation. The distribution of permafrost on the Veneto mountains has been studied through two different approaches: applying the statistical model AP-MOD (Alpine Permafrost Model) developed by the University of Zurich and applying the deterministic model ALPINE 3D developed by the Swiss Federal Institute for the Study of Snow and Avalanches. In the first case (statistical model) the results showed that, in Veneto, permafrost is present in a discontinuous way only in the province of Belluno and, considering the whole range of possible climatic conditions (therefore also the most warm ones), the permafrost is present at altitudes above 2500 m for about 5 km2, i.e. on 0.03% of the regional territory. According to the deterministic model, which was applied using data from 44 automatic stations present on the regional mountain territory and considering the years 1998 to 2009, the presence of permafrost was likely, for the period considered, on an average of 5.3 km2.

The Dolomite glaciers have shrunk by 49% since 1910

Fig. 6.3.3 – Variation of the extent of the Dolomite glaciers (27 sample systems, measurements in hectares) - Years 1910:2009

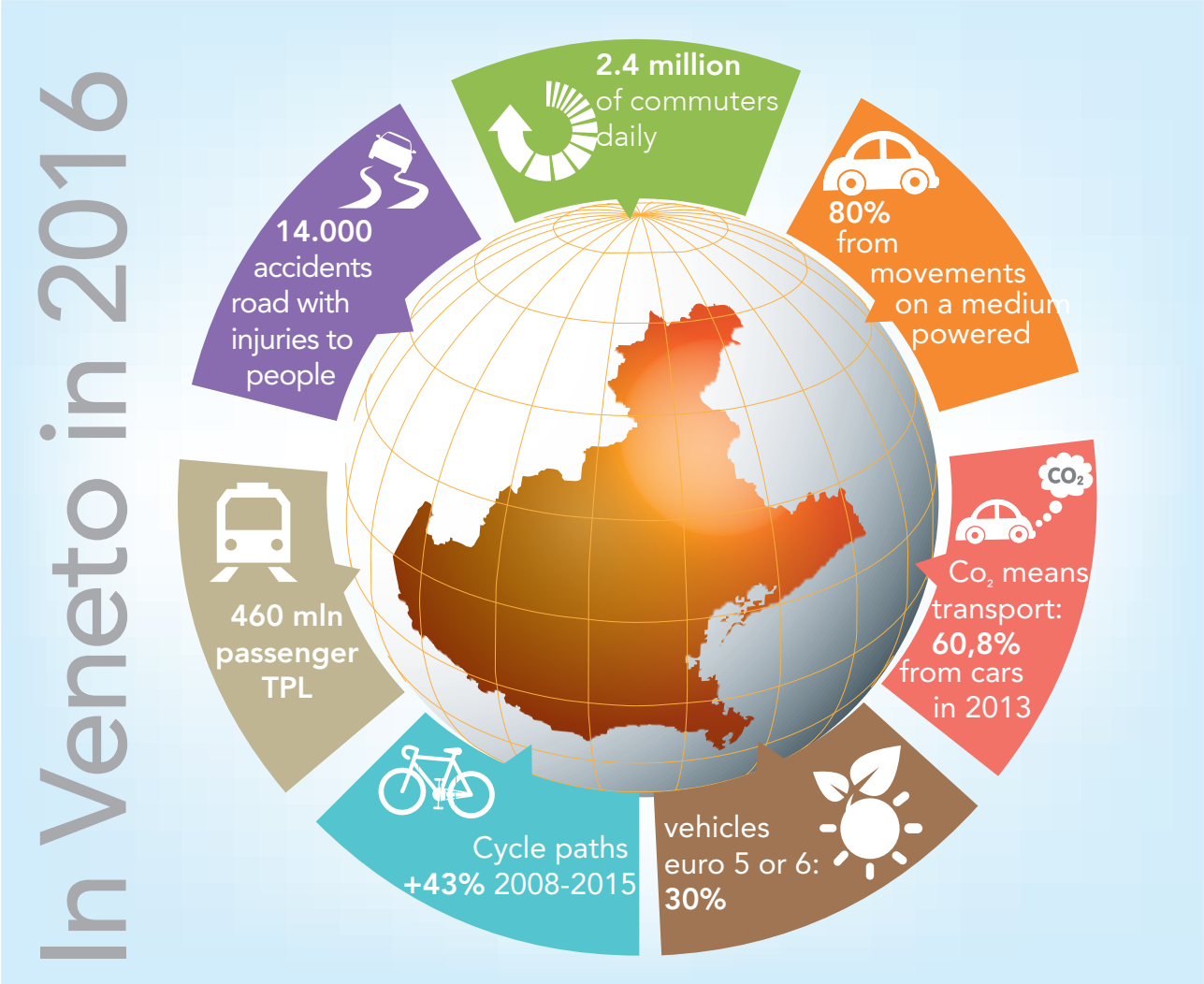


Source: Processing of data from ARPAV by the Statistics Office of Regione Veneto

5 A natural process that consists of the transport of debris, even of considerable dimensions, downstream.

Chap. 7 - Veneto and sustainable mobility

The central Veneto plain area is characterised by a form of urbanisation known as the "widespread city" and therefore, Veneto is considered one of the largest areas of settlement dispersion in Italy. This feature is not correlated to sustainability: the issue is certainly very complex, however, many are the studies that have shown its effects on the transport system: it causes an increase in travel by private car, with consequent impacts on the environment. In Veneto, daily trips for study and work are mainly made by motor vehicles and, among these, 85% by private car, while the use of public transport remains at a very residual share, 5.9%. In order to reduce the use of cars, in addition to encouraging the use of public transport, there are, however, concrete actions that can already be implemented and that relate to smart mobility. Some measures have already been put in place in many Italian cities, even if in our country development is quite slow and discontinuous. These include sharing mobility, carsharing and bikesharing, car parks in key areas to avoid the entry of private cars into cities as much as possible, electric mobility, infomobility, for which the use of the most modern technologies facilitates the movement of public transport and keeps citizens properly informed.



"For each percentage point of increase in urban cycling, there is a 2 - 5% decrease in accidents among all road users".

(Safety in numbers, Jacobsen 2003-2009)

Introduction

A study has been disclosed just in these days on the danger of using earphones while riding a bike: listening to music or making a phone call with earphones or a headset would not increase the number of accidents because the bicyclist's attention would grow as their ability to hear traffic noise decreases. The said study was carried out in the Netherlands, the country of cycling par excellence and with excellent infrastructure, where cycling is therefore safer. If similar studies were carried out in other countries, the results could be different, probably depending on the different levels of implementation of measures for sustainable mobility but also on the sensitivity of citizens. In Italy, the development of sustainable mobility is slow, even if some progress has been made: according to the eleventh Report on "Sustainable Mobility in Italy: survey on the main 50 cities", prepared in 2017 by Euromobility under the patronage of the Ministry of the Environment, Land and Sea Protection, in 2016 there was an improvement in air quality after the deterioration in 2015. In addition, air quality also depends on the means of transport used daily. Among the first "eco-mobile" cities in Italy, Parma is at the top of the podium, with two Veneto capitals: Venice and Padua, respectively at fourth and fifth place. What are the services and means of transport available to citizens in Veneto to reduce traffic, improve air quality and cut energy consumption? How far has the integration of the various transport systems and infomobility progressed?

7.1 The everyday movements of people

Five years after the last Population Census,

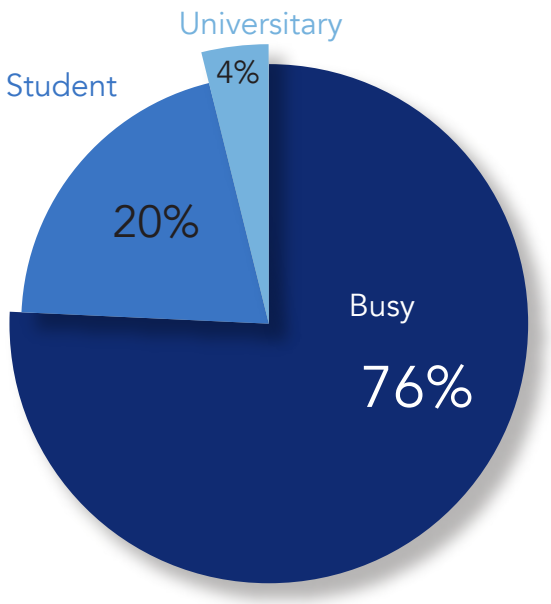
statistical database "Populations using a region and mobility "[1]. In this case, the reference population is not that of residents, as in the case of the Census, but all those registered in Italy and those not registered but working or studying in Italy: the so-called insistent population.

Data from 2015 show that in Veneto almost 2,4 million people travel regularly for study or work in Veneto. Three quarters of them are workers, while the residual share is made up of school pupils and university students.

2,4 million people travel to veneto every day

By focusing on a type of analysis that was carried out with the 2011 data,the hubs and basins of the Veneto municipalities for 2015 were found. The results do not differ much it is interesting to re-evaluate the map of movements in our region, this

Fig. 7.1.1 – Distribution% of individuals who usually move by motivation. Veneto - Year 2015

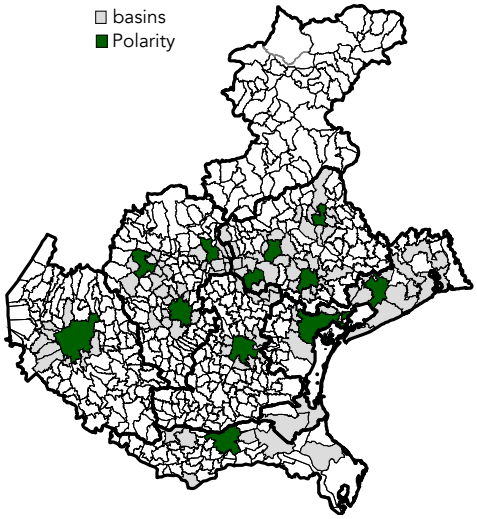


Source: Processing by the Statistics Office of the Veneto Region

time using a different source of data that is not the Census but is in some ways very similar to it, namely the data from the integrated from the previous one, since the twelve Veneto municipalities that attract

1 Archimede Project, included in the National Statistical Programme by ISTAT, with the aim of identifying and quantifying the components of the population characterised by different residencies: "effective" residents, temporary residents and daily commuters.

Fig. 7.1.2 – Municipalities Hubs and Basins - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

more than 20,000 people into their territory (the so-called hubs) were the same as in 2011, with the sole exception of Belluno.
Therefore, in addition to the other six provincial capitals, the hubs in 2015 were Bassano del Grappa, Castelfranco Veneto, San Donà di Piave, Schio, Conegliano and Montebelluna.
If we only consider those coming from out of the municipality, Padua is the most attractive municipality in Veneto, with over 120,000 arrivals, followed by Venice (91,000 arrivals) and Verona (81,500).
Considering Padua is the most attractive municipality in Veneto Also the movements of residents in the polar municipality, Venice is the first municipality in Veneto, with over 200,000 people moving within its area, coming from outside or leaving from within it.

Padua is the most attractive municipality in Venetoto

For each hub the basins were then identified, in this case the first nine municipalities were selected for the number of individuals departing towards the hub: it should be noted that it is mainly the municipalities of the first urban belt the most nourished

Tab. 7.1.1 – Individuals who travel for work or study reasons by municipality of origin and destination by provincial capitals. Veneto - Year 2015

		destination municipality							
		Venezia	Verona	Padova	Vicenza	Treviso	Rovigo	Belluno	Total
starting municipality	Venezia	108,936	274	3,740	254	967	110	39	114,320
	Verona	591	99,868	1,462	447	38	29	11	102,446
	Padova	2,776	485	76,199	723	279	280	30	80,772
	Vicenza	696	826	1,783	39,015	80	54	6	42,460
	Treviso	1,944	83	1,098	75	24,031	20	38	27,289
	Rovigo	403	120	1,263	63	12	17,611	3	19,475
	Belluno	205	41	384	16	90	3	12,160	12,899
	Total	**115,551**	**101,697**	**85,929**	**40,593**	**25,497**	**18,107**	**12,287**	**399,661**

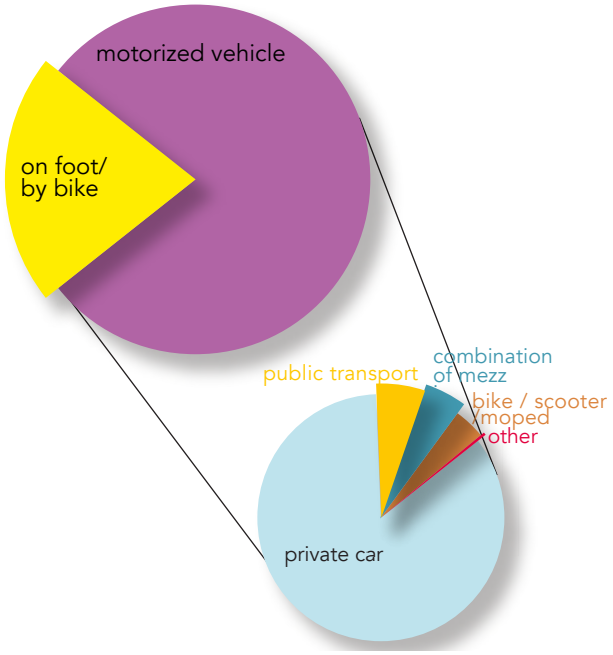
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

reservoir.
Some hubs are also interrelated, respectively, with the same basin as each other: this is the case for Padua and Venice, which exchange more than 6,500 people in both directions.
To have an idea of the phenomenon among the provincial capitals of Veneto, we have prepared a matrix of origin/destination where it can be noted that the vast majority of individuals move within their municipality of origin: the most "sedentary" are those from Verona, 97% of them have Verona as their origin and destination, vice versa the municipality of Treviso has the lowest percentage, with 88% of cases staying in the municipality.
For inter-municipal mobility, however, in addition to the aforementioned cases of Padua and Venice, many movements are noticed from all municipalities to Padua, all over 1,000 units, with the sole exception of Belluno. There are also many movements from Treviso to Venice, of almost
2,000 people.
A survey was made on the ways in which these mouvements take place, which analysed some interesting variables for the population of each Italian region. As far as Veneto is concerned, the average travel is 11.1 km long, 21.7 minutes long and 29 km/h fast, considering all the means used and all the reasons, work, study and family needs.
The preferred means of transport for the people of Veneto
is undoubtedly the car, since almost 80% of those interviewed use it for their daily travels, while the rest prefer to travel on foot or by bike. Among those who choose motorised transport, the overwhelming majority, 85%, opt for the car. Public transport is less successful (5.9%), even less so is the use of two-wheeled vehicles (3.9).

Veneto people prefer to travel by car

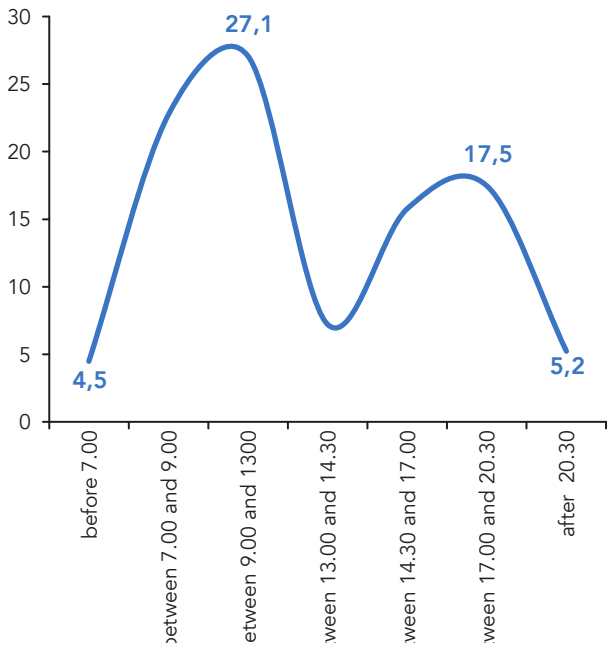
The survey shows that more than half of the travels take place in the morning, by 1 pm; the next peak is between 5 pm and 8.30 pm with people getting back home.
Analysing the means of transport preferred by the people of Veneto, comparison with the other Italian regions shows that Veneto is not among the most motorised in Italy. In the 2016 ranking, Veneto was fifteenth with 623 vehicles per thousand inhabitants, in line with the Italian average.
The regions with the highest rate are the Val d'Aosta, with 1,171 vehicles per thousand inhabitants,

Fig. 7.1.3 – Movements by means used. Veneto - Year 2016



Source: Processing of data from Isfort by the Statistics Office of Regione Veneto

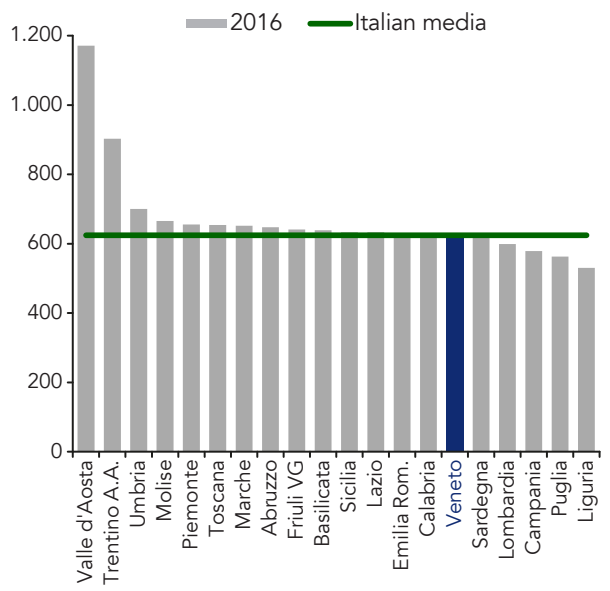
Fig. 7.1.4 – % distribution of mouvements b time of departure Veneto - Year 2016



Source: Processing of data from Isfort by the Statistics Office of Regione Veneto

Trentino Alto Adige, with a value of 903, and Umbria with 700, regions where the use of cars to meet travel needs is also encouraged by the particularity of the geographical and settlement layout.
In detail, in the capitals of Veneto, the lowest rate is found in Venice, with 426 cars per 1,000 inhabitants, however for the lagoon city the peculiar characteristic of its historic centre must be considered. Belluno, Rovigo and Verona, on the other hand, are above the regional average, with rates of 671, 652 and 635 respectively.
The total vehicle fleet in Veneto amounts to over 4 million vehicles: 3 million cars, to which almost half a million motorcycles must be added, 327 thousand

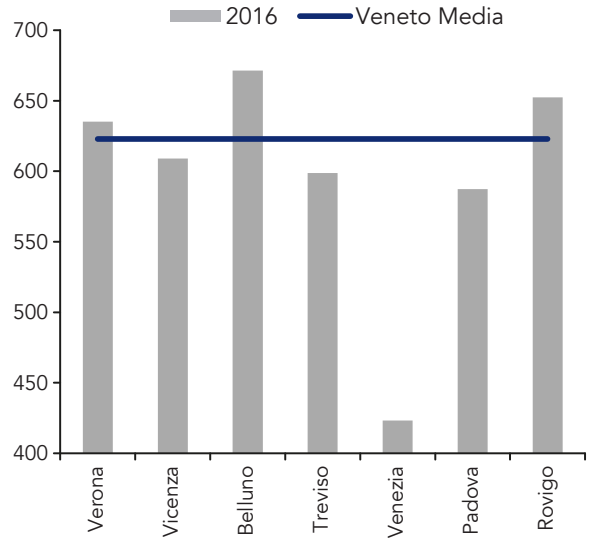
Fig. 7.1.5 – TMotorisation rate (circulating cars per 1000 inhabitants) by region. Year 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

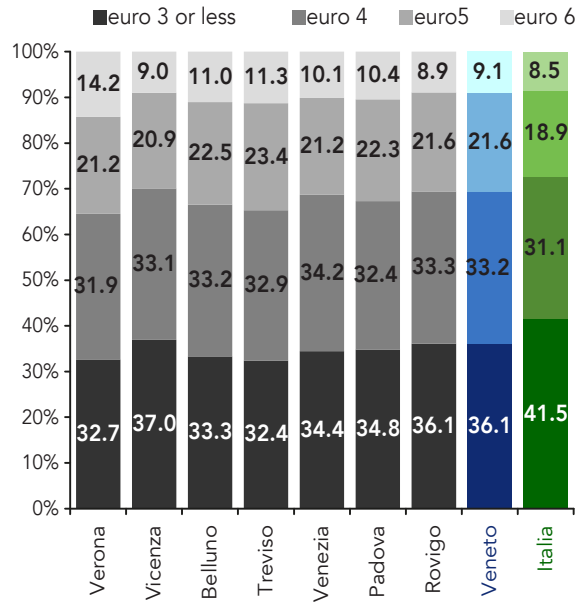
trucks used for the transport of goods, 65 thousand special vehicles, 55 thousand trailers or tractors and almost 7 thousand buses; these are the most important.
Since cars represent the largest part of the vehicle fleet on the streets of our cities, they are also the largest source of pollution; let's now examine the distribution by fuel type and emission classes in the

Fig. 7.1.6 – Motorisation rate(*) in the provincial capitals (cars circulating per 1000 inhabitants). Year 20166



(*) cars circulating per 1000 inhabitants
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 7.1.7 – Cars circulating in the provincial capital municipalities by emission class - Year 2016



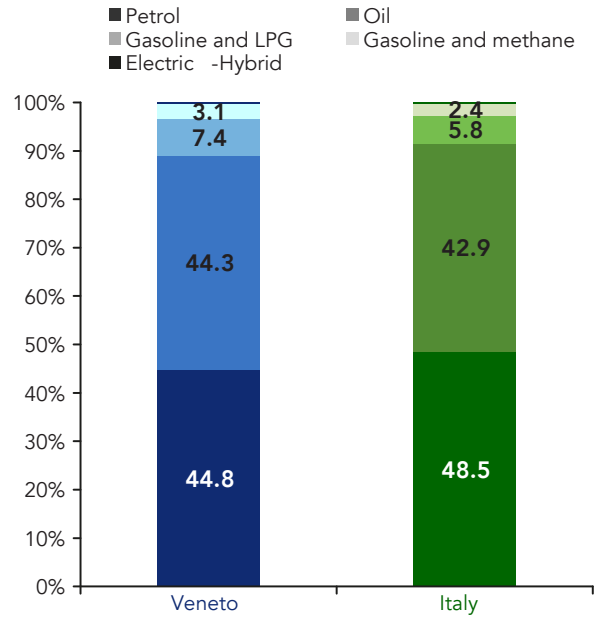
Source: Processing of data from ACI by the Statistics Office of Regione Veneto

seven capitals.
In Veneto, the fleet of motorvehicle is "younger" than the Italian average; the Euro 5 and Euro 6 emission classes, which together make up more than 30% of the vehicles in Veneto, are higher than in Italy, where this share reaches 27.4%, while vehicles of the oldest emission classes (Euro 3 and lower) are 36.1% in Veneto and 41.5% at national level.
Verona is the municipality with the highest percentage concentration of Euro 6 class vehicles (14.2%), while Vicenza has the highest percentage of Euro 3 and lower vehicles (37%).

More than 4 million motorvehicles in the Veneto fleet

In Veneto as well as at the national level, the vehicles in circulation are mainly fuelled on petrol or diesel: these two types represent 89% of the total (91.4% in Italy); petrol and LPG total 7.4% (5.8% in Italy), petrol and natural gas 3.1% (2.8% for Italy). The electric-hybrid powered vehicles only reaches 0.4% (0.3% in Italy).
This scenario is likely to change in the near future: many of the world's largest car manufacturers have announced a progressive abandonment of diesel engines, as the costs for this technology to maintain the required pollution emission standards would be too high.
At the same time, many European capitals have already suggested that in the near future access to city centres will be banned for diesel vehicles. As a result, many manufacturers are focusing on the construction of

Fig. 7.1.8 – Cars by fuel type. Veneto and Italy - Year 2016



Source: Processing of data from ACI by the Statistics Office of Regione Veneto

7.2 The impact of traffic on the environment

As we have seen, cars represent the largest share of vehicles circulating on the roads and the good news is that the incidence of those belonging to the most recent emission classes is increasing (Euro 5 and 6). However, how much does vehicle traffic actually contribute to global greenhouse gas and particulate pollution? We conducted a brief analysis on CO2 and PM10 emissions using the data contained in the regional INEMAR2 inventory updated as of 2013. Although the vehicle situation has evolved further since 2013, that year's emissions analysis can still provide a good snapshot of the emission distribution between macro-sectors hybrid-electric models in order to reduce pollutant emissions atmospheric emissions. It was initially developed by the Lombardy Regional Authority, in collaboration with the Piedmont Regional Authority. It currently used within the framework of an interregional agreement between Lombardy, Piedmont, Emilia Romagna, Veneto, Friuli Venezia Giulia, Puglia and the Autonomous Provinces of Trento and Bolzano. and within the transport sector. For years to come, an improvement is obviously expected due to the progressive replacement of old vehicles with those technologically more advanced in terms of controlling pollutant emissions.
In detail, in Veneto road transport is the main responsible for CO2 emissions, accounting for almost 28% of the total, i.e., 8.6 million tonnes per year. Then there is non-industrial combustion, mainly consisting of domestic heating, with 24% of emissions equal to 7.4 million tonnes of CO2. As far as particulate matter is concerned, the most polluting macro-sector is by far that of non-industrial combustion and, in particular, as already noted, domestic heating: non-industrial combustion alone emits 67.7% of the regional total of PM10 (over 10,400 tonnes per year). The second most emissive macro-sector for PM10 is road transport, with 13% of

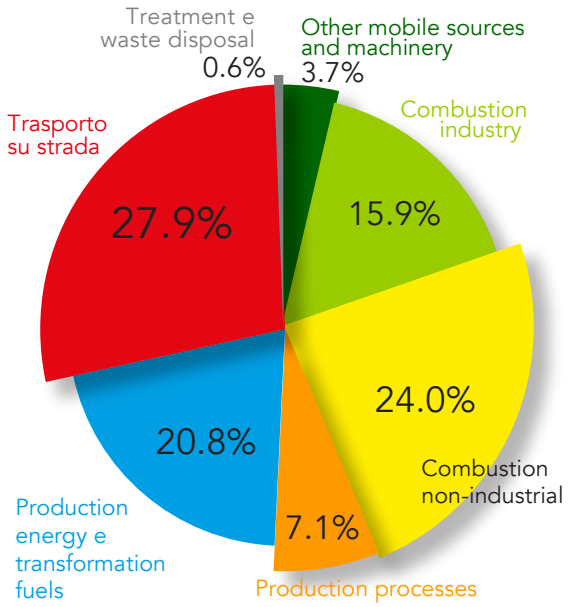
Tab 7.2.1 - CO2 and PM10 emissions by emissive macro-sector (thousands of tonnes for CO2 and tonnes for PM10). Veneto - Year 2013

Sector	CO2 (kt/a)	PM10 (t/a)
Agricolture		623,7
Other sources and	-3.251,4	351,9
Other mobile sources and machinery	1.148,5	768,6
Industrial combustion	4.907,9	303,3
Non-industrial combustion	7.399,5	10.435,3
EFuel extraction and distribution		
Production	2.180,7	360,1
Energy production and fuel transformation	6.396,1	53,4
TRoad transport	8.579,6	2.000,9
Waste treatment and disposal	182,0	8,6
Use of solvents		499,3
Total	**27.542,8**	**15.405,2**

Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati INEMAR

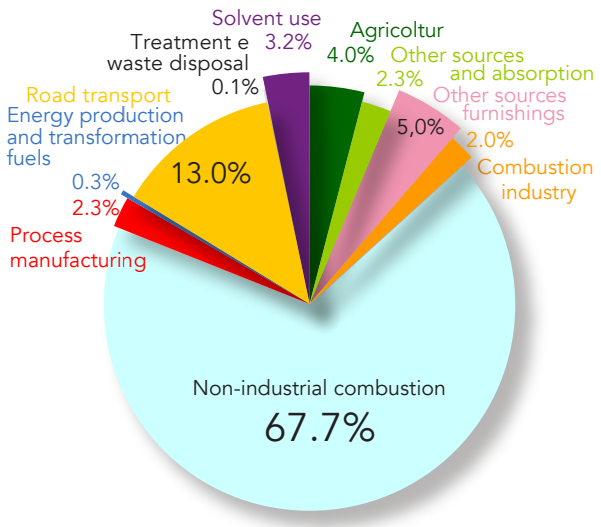
the total and 2,000 tonnes produced in 2013.
By focusing on the transport macro-sector to understand the impact of different vehicle types in terms of pollution, we see that for both CO2 and PM10 cars represent the largest source of pollution among all motor vehicles, in the first case with almost 61% of the total and in the second with 45.5%. These figures can be explained by the fact that, although cars pollute less than heavy goods vehicles, there are much more of them and therefore, in the final emission count, they prevail by far. The lower relative incidence of PM10 compared to CO2 is due to the fact that almost half of the circulating cars are fuelled on petrol, which is less polluting in terms of PM10; this consequently reduces the incidence of cars. For commercial and heavy-duty vehicles, this "petrol" effect is almost eliminated, as almost all of these types of vehicles are fuelled on diesel, which is one of the main causes of particulate matter emissions.
Again with reference to the transport sector there is another factor that affects the overall emissions

Fig. 7.2.1 - CO2 emissions per macro-sector (*) (percentage incidence). Veneto - Year 2013



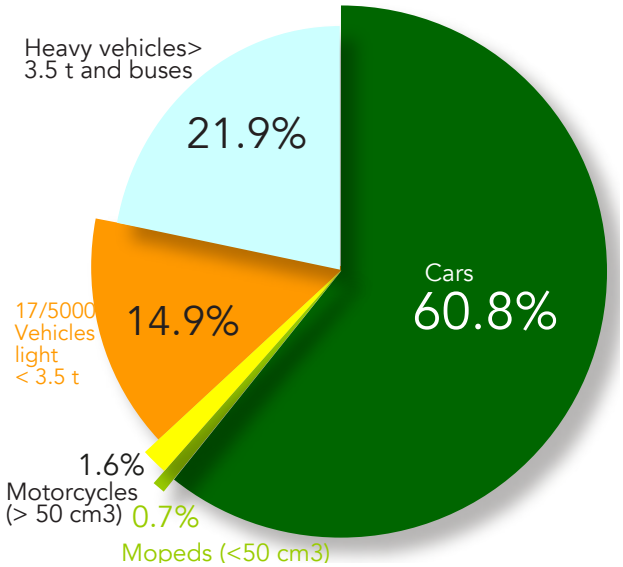
(*) Excluding other sources and absorptions
Source: Processing of data from INEMAR by the Statistics Office of Regione Veneto

Fig. 7.2.2 - PM10 emissions by emission macro-sector (percentage incidence). Veneto - Year 2013



Source: Elaborations by the Statistics Office of the Veneto Region on INEMAR data

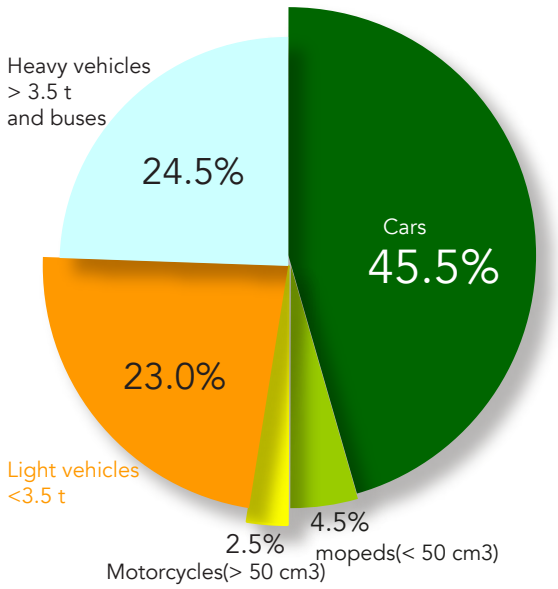
Fig. 7.2.3 - 96/5000
CO2 emissions in transport by emissive sector (thousands of tons). Veneto - Year 2013



Source: Elaborations by the Statistics Office of the Veneto Region on INEMAR data

of carbon dioxide and fine dust and is represented by the three main road types: urban, suburban and motorways. For both CO2 and PM10, the highest concentration of emissions, 39.4% and 42.6% respectively, is found on suburban roads, where the majority of traffic is also found. The second road type in terms of the intensity of pollutant emissions from traffic is represented by motorways (33%) for CO2 and by urban roads (29%) for PM10. In detail, passenger cars are confirmed as the main source of pollution for both CO2 and PM10 in all three road types analysed. For the other types of vehicles it is interesting to observe that their incidence changes depending on the type of road and the pollutant emitted. As far as carbon dioxide is concerned, heavy-duty vehicles are the second most emissive vehicle on motorways and suburban roads, where their presence is greatest, while on urban roads it is light-duty vehicles (commercial vehicles under 3.5 tonnes) that pollute the most, after cars. The situation is slightly different for fine particles, for which light-duty vehicles pollute more than heavy ones, not only in cities but also in suburban roads, while the latter prevail only on motorways.

Fig. 7.2.4 -PM10 emissions in transport by emissive sector (tons). Veneto - Year 2013



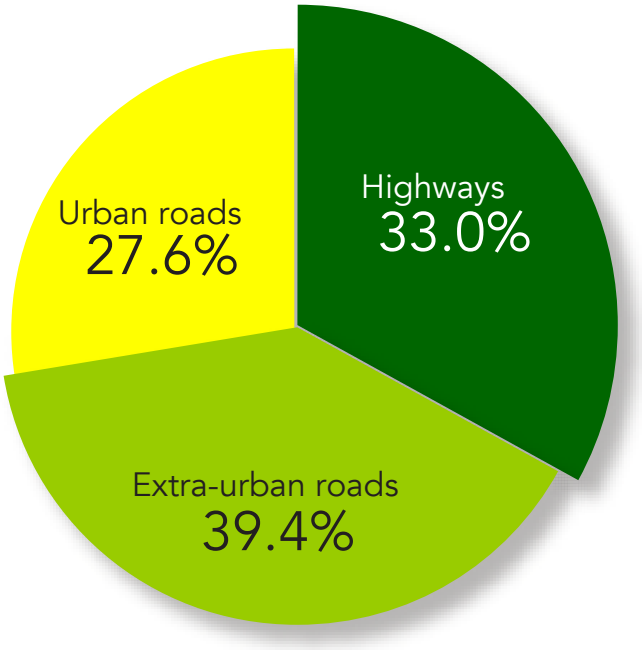
Source: Elaborations by the Statistics Office of the Veneto Region on INEMAR data

7.3 Sustainable mobility

The National Observatory on Sharing Mobility[2], in its first National Report of 2016, identifies the negative impacts of the transport system on the natural environment and ecosystems - greenhouse effect, climate change, acid rain -, on the urban environment - air quality, noise, land and landscape consumption, degradation of buildings and Monuments -, on health and quality of life - diseases, accidents, injury - and in terms of costs arising from time losses caused by traffic management and "negative externalities", i.e., the construction and maintenance of transport infrastructure. All innovative shared mobility services, however, produce positive effects thanks to the reduction in vehicle traffic and the shift towards more sustainable modes, translating into a reduction of the main impacts; moreover, less public space allocated to vehicle traffic means more space for other uses such as trade, walking, playing and other means such as public transport and cycling.

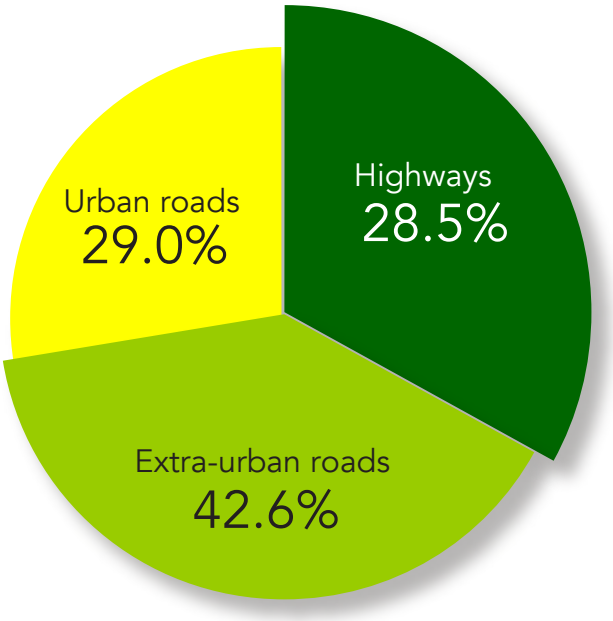
2 Established in September 2015, promoted by the Ministry for Environment, Land and Sea Protection and by the Foundation for Sustainable Development, it aims to create a platform for collaboration between public and private institutions, shared mobility operators and the world of research to analyse, support and promote mobility sharing in Italy.

Fig. 7.2.5 - CO2 emissions in transport by area (thousands of tons). Veneto - Year 2013



Source: Elaborations by the Statistics Office of the Veneto Region on INEMAR data

Fig. 7.2.6 - PM10 emissions in transport by emission sector and area (tons). Veneto - Year 2013



Source: Elaborations by the Statistics Office of the Veneto Region on INEMAR data

But how do people move around in the Veneto? We know that cars are by far the preferred means of systematic mobility, but they are not the only means of transport: "in the central-eastern Veneto area, a sort of settlement nebula has formed, characterised by paroxysmal and monomodal mobility. The process of settlement dispersion has been accompanied by the expansion of individual mobility, whose unusual (and unexpected) dimensions cannot be explained by the mere need for commuting, but are rather explained by a series of behaviours, questions, claims of rights, status changes. A real

automobile anthropology is born "[3].
In addition to these established habits, individual behaviours that go in the opposite direction are also observed. According to the recent First Report on the Bike economy and Cycling cities in Italy by Legambiente, for example, Treviso deserves the title of being bike-friendly, as 25% of its population use bicycles for urban travel, then Bolzano and Pesaro both with 28% and Ferrara with 27%; Padua also has a good position with 17%, and is included among the twelve noteworthy cities.
However, the Audimob sample surveys carried out by ISFORT show that in Veneto, as in the rest of Italy on average, habits did not change between 2007 and 2016, with the percentages of daily trips on foot/by bicycle rising from 22.7% (20.5% in Italy) to 21.3% (20.4% in Italy).
In the Italian provincial capitals, between 2008 and 2015, the number of cycle paths increased by 48%: from 2,823.8 km to 4,169.9 km; in the Veneto capitals, in the same period, the weighted average increase was 43.1%.
This "misalignment" between the increase in kilometres of cycle paths and the use of bikes is largely due to the sub-optimal quality of infrastructure, often built with criteria that do not correspond to standards, positioned in inadequate locations and with routes that are therefore not attractive enough, not even from a safety point of view. The "cycleability" index calculated by Legambiente, as a summary of various suitably weighted aspects (length of independent cycle paths, cycle paths in reserved lanes, on pavements, mixed bike/pedestrian paths, in 20 and 30 km/h speed limit zones, green routes, etc.) looks at the quality of the infrastructure as a characteristic that can encourage bike mobility. In the ranking, where the maximum value of 41.1 meters equivalent of cycle paths per 100 inhabitants is that of Reggio Emilia, means paying attention to environmental issues and the safety of vulnerable road users; however, it also has the deeper meaning of promoting greater social interaction in public spaces,
Reintroducing the concept of the "town square" as the new agora, i.e., open public places intended for meetings and exchanges between citizens.
Padua is the first of Veneto capitals with 18.76, just under 20 meters equivalent per 100 inhabitants: it is the only one with a good although not excellent situation.
Promoting alternatives to private cars Actions and commitment to sustainable mobility are uneven across Veneto.
With respect to these issues, in Veneto as well as at the national level, the situation is very uneven; the best results have been achieved where "the administrations' commitment resulted in the implementation of concrete actions, while elsewhere there are only timid signs.
An interesting data is the presence of pedestrian areas, albeit with quite different incidences, and 30 km/h speed limit zones in six of the seven capitals; the spread of the bike sharing services and the provision of park and ride car park slots (also with different relevance) in five capitals are also good; even more diverse situations are found for limited traffic areas and car sharing.
Venice and Padua stand out for the presence of all the listed services and for the high incidence of

3 Insediamento e mobilità nel Nord Est: appunti su una nebulosa senza centro di Domenico Luciani, Fondazione Benetton Studi Ricerche 2016

Tab. 7.3.1 - Density of cycle paths in the provincial capital municipalities (km per 100 km2 and % variation) - Years 2008-2015

	2008	2015	2015/2008
Verona	32.7	44.7	27.0
Vicenza	45.7	72.9	37.3
Belluno	4.4	10.5	57.8
Treviso	77.7	109.6	29.1
Venezia	18.9	28.3	33.3
Padova	133.0	180.6	26.4
Rovigo	15.1	16.3	7.3
Italia(*)	**13.7**	**20.2**	**32.3**

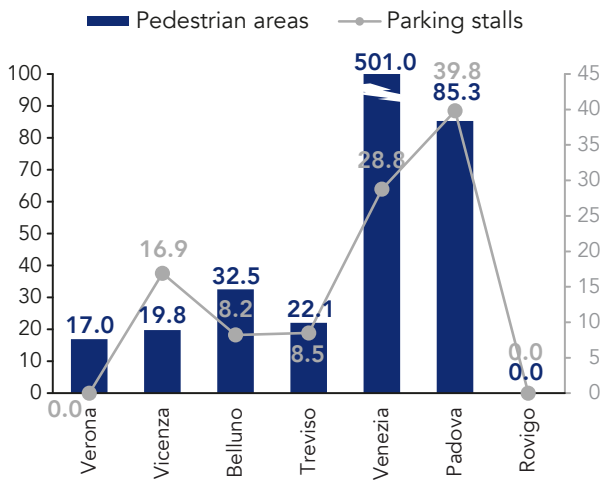
(*)Italy refers to the total number of provincial capital municipalities whose data is available for the reference year.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Tab. 7.3.2 -Cycling index (metres equivalent per inhabitant) in the provinces of Veneto and national ranking - Year 2015

CITy	Metres equivalent/inhabitant	National
Reggio Emilia	41,06	1
Padova	18,76	9
Treviso	13,77	20
Venezia	12,82	22
Vicenza	12,79	23
Verona	12,05	24
Rovigo	9,34	33
Belluno	7,2	37

Fonte: Elaborazioni dell'Ufficio di Statistica della Regione del Veneto su dati Legambiente

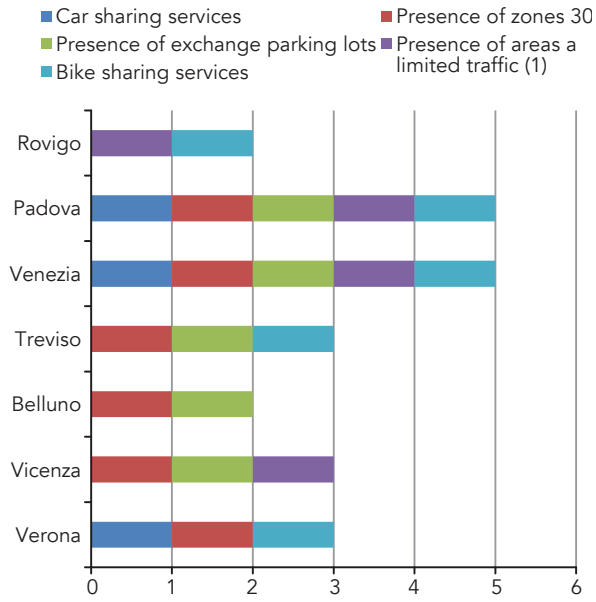
Fig. 7.3.1 -- Availability of pedestrian areas (m2 per 100 inhabitants) and park and ride car park slots (slots for 1,000 cars) in the provincial capital municipalities - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

park and ride car park slots and pedestrian areas, even if the exceptional value of Venice is influenced by the configuration of its historic centre.

Fig. 7.3.2 - Services for sustainable mobility in the capital municipalities of Veneto* (presence = 1, absence = 0) - Year 2015



(1) Updated as of 2016
(*) A coloured bar is assigned to the city if the service is present
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

7.4 Local public transport5 A new planning season

The approval of the Decree of the Ministry of Infrastructure and Transport of 4 August 2017, which establishes the criteria for the drafting of Sustainable Urban Mobility Plans as expressed in the 2014 Guidelines of the European Commission and the subsequent Decree of 9 March 2018 which has allocated specific funding, is an important step in the approach to mobility planning, especially urban and metropolitan. The Sustainable Urban Mobility Plan is a strategic planning tool that develops a vision of an urban mobility system in the medium to long term, with goals of environmental, social and economic sustainability and with a view to integrating urban planning and means of transport. In Veneto, the Metropolitan City of Venice, the Padua Metropolitan Conference and the Authorities of the Verona area, have recently
launched activities aimed at the adoption of the Su-

stainable Urban Mobility Plan.a significant increase in travels made on local public transport. In 2016, 460.4 million passengers were transported, compared to 439.5 million in 2015.
This increase affects all modes of transport: the number of passengers transported by regional railway services has increased, as has the number of passengers transported by suburban and urban car services - both car and tram services - and the number of passengers transported by boat in the Venice lagoon.
This result comes after years of stability or modest increases in the demand for public transport and a substantial stability in the supply of services.

Regional and local railway passenger services

Regional and local railway services show an increase of about half a million passengers in 2016, with an almost unchanged production mileage, compared to the previous year.
This result represents[4] a reversal of the 2015 trend, which had instead recorded a significant decrease in passengers transported compared to the greater services offered.
The overall improvement measured is in line with the trend of the results for customer satisfaction surveys aimed at assessing the quality of the service offered as perceived by users. From 2013 to 2016, the "total travel" indicator increased by 7 percentage points, from 81% to 88%.
Buses, trams and lagoon navigation in local public transport services

The number of Venetians moving with local public transport services is growing

In 2016, the public bus, tram and navigation services sector in Veneto showed interesting signs of recovery in terms of citizens' satisfaction. In fact, passengers transported in all these modes of transport increased significantly, as a result of funding and a service offering that was substantially stable and in line with previous years.
In 2016, there was a significant increase compared with the previous year: passengers transported stood at a total of 416.9 million, confirming the modest signs of recovery recorded in 2015.
Such a result has never been achieved before. Compared to 2010, the demand met in Veneto has increased by more than 43.8 million passengers, with a substantially unchanged offer of services compared to the past: 121.1 million km of bus and urban services, 2.1 million km of tram services, 520,457 hours of navigation in the lagoon. The breakdown of the data by mode of transport shows that the number of passengers using tram services in Padua and Venice, 24.7 million, is particularly noteworthy, confirming the importance of these systems in high density urban and metropolitan areas. A peculiar phenomenon in Veneto LPT is the constant increase in the number of passengers travelling on boat services, which in 2016 reached the unprecedented value of 139.1 million, of which 69%

4 Edited by the Directorate for Infrastructure, Transport and Logistics

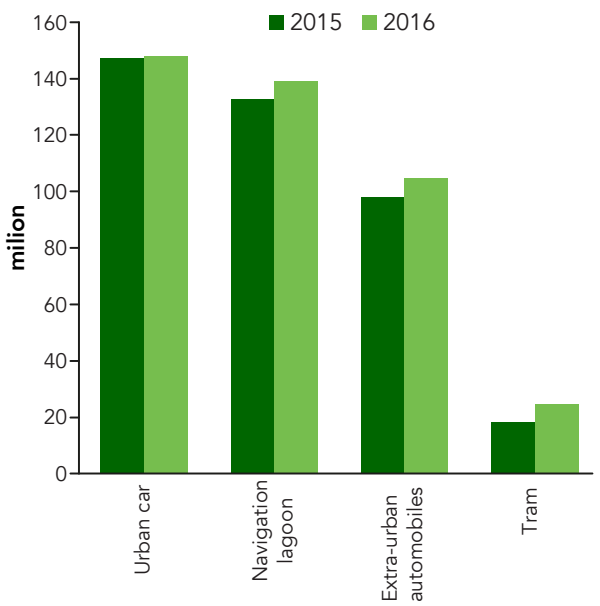
Tab. 7.4.1 – Rail services: transport demand and offer per year. Veneto - years 2012: 2017

	2012	2013	2014	2015	2016	2017*
Railway network extension	1.245	1.245	1.245	1.245	1.245	1.245
of which:						
RFI National Railways	1.188	1.188	1.188	1.188	1.188	1.188
Regional Systems	57	57	57	57	57	57
Trains*actual kilometres	15.135.350	15.358.572	15.950.313	16.245.178	16.375.406	16.339.287
Passengers	41.272.276	43.732.306	45.624.331	43.052.114	43.529.650	n.d.

(a) Estimated figure
Source: Processing of the Veneto Region, U.O. Mobility and Transporti

is made up of season ticket holders.
The fleet of vehicles used in local public transport services are older than the European average. The comparison shows that the European average is around 7 years, while the figure in Veneto was about 13.5 years in 2017.
However, Regione Veneto has strongly committed itself to the development of LPT, with important expenditure lines, including use of European Structural Funds, in the co-financing of the purchase of latest generation Euro 6 or EEV6 buses by the businesses entrusted with LPT services.
In essence, the focus was not only on a renewal of the fleet to lower the average age of vehicles but also to improve their quality, with clear positive effects of the actions implemented even in other sectors, such as the improvement of air quality.
The investments made and concluded in the 2014-2017 three-year period have benefited from public resources amounting to approximately 22 million euros, allowing the purchase of 160 buses. There is still a pressing need for financial resources to be made available in order to keep up with the average fleet age at EU level.

Fig. 7.4.1 – Public transport services by car, tram and lagoon navigation: passengers carried. Years 2015: 2016



Source: Processing of the Veneto Region, U.O. Mobility and Transport

ITS- Electronic Ticketing Systems (ETSs)

Improving the accessibility of local public transport is a very hot topic. In this regard, the development of technology and intelligent transport systems have a dual importance: first, as a tool for use and consumption by users, to improve the usability and accessibility of public transport and consequently increase their use, and second, in terms of operators and competent Authorities, to promote the planning, planning and monitoring of services offered.
Regione Veneto's actions to continue the spread of ETSs are therefore particularly important. In the last three years public financial resources have been allocated for about 3.5 million euros, for activation ETSs in areas still deprived of them; this especially following Regional Council Decree No. 1059 of 29 June 2016, which approved the new guidelines and technical standards for the interoperability of ETSs.

The means of local public transport: a renewed fleet

This has been a further step towards the so-called single regional ticket goal, for which the development of technological equipment is a necessary prerequisite.

7.5 Sustainable mobility and road safety: road accidents in cities

The promotion of sustainable mobility goes hand in hand with activities aimed at road safety education and improving road safety levels. This means information, awareness and training, including knowledge on the phenomenon of road accidents.
The latest official data available concerns the year 2016 and comes from the Survey on road accidents resulting in death or injury7 , conducted by ISTAT in Veneto in collaboration with the Regional Authority and the Provinces and Municipalities, which mainly operate in urban areas with the help of the Local Police.
In Veneto in 2016 they occurred 14,034 accidents, which caused 344 deaths and
19,142 cases of injury. These figures giving an idea of the scale of the phenomenon, the downward

Tab. 7.4.2 – Buses, trams and lagoon navigation in local public transport services: actual production (km/hours of motion) per year. Years 2012:2016

Actual production (Km/hours in motion)	2012	2013	2014	2015	2016
Suburban bus services (km)	85.258.262	84.756.267	84.056.717	85.611.144	86.595.512
Urban bus services (km)	37.986.060	38.479.734	38.766.085	38.888.245	36.914.265
Tram services (km)	998.205	992.174	1.159.850	1.531.159	2.136.918
Navigation services (hours in motion)	513.145	508.385	509.398	517.158	520.457

Fonte: Elaborazioni Regione del Veneto, U.O. Mobilità e Trasporti

Tab. 7.4.3 – - Lagoon navigation services: ordinary passengers and season ticket holders. Years 2010:2016

Anno	Ordinary travellers transported during the year		Season ticket holder travellers transported during		Season ticket holder travellers transported during
	n°	% of incidence on total	n°	% of incidence on total	n°
2010	32.602.716	28,9%	80.361.636	71,1%	112.964.352
2013	37.934.816	31,4%	82.714.281	68,6%	120.649.097
2014	38.855.714	30,3%	89.492.196	69,7%	128.347.910
2015	43.075.418	32,4%	89.731.780	67,6%	132.807.198
2016	42.512.645	30,6%	96.601.898	69,4%	139.114.543

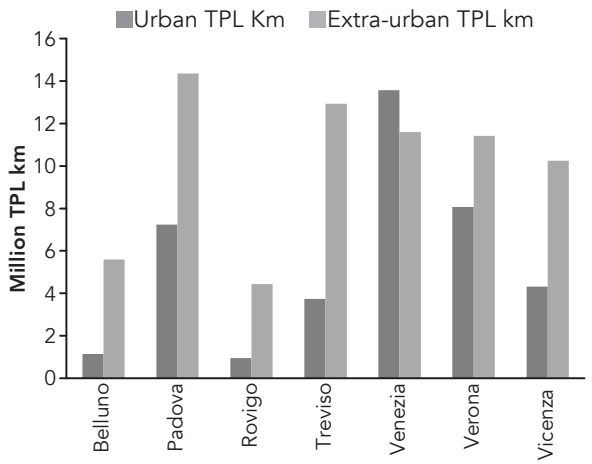
Source: Processing by Regione Veneto, Mobility and Transport

trend of which came to a halt in 2014, when the figures started stabilising with only slight increases. The breakdown percentages by road type show that the majority of accidents, 70.1%, occur in urban areas, 4.5% on motorways and Survey included in the National Statistical Programme 25.4% on other roads, i.e., national, regional and provincial roads outside built-in areas and municipal suburban ro-

ads. Although there are more accidents in urban areas, they are also generally less severe than out of town events.
From the 2016 data, an injury index[5] has been calculated by road type: in Veneto it is 128.4 on urban roads, 168.9 on motorways and 152.8 on other roads.
In restricting our considerations to the urban environment, it is interesting to compare the provincial capital with the set of other municipalities (capitals included), each in its respective territorial area. In 2016, 37.7% of urban accidents in Veneto occurred in the capitals; the incidence of people killed and injured was 21.4% and 36.5% respectively, i.e., lower than the percentage of accidents.
This data indicate a urban road system is less damaging than the average in other municipalities. Looking at the individual cities, Verona with 55.4% and Padua with 50.8% account for more than half of the total accidents in urban areas in the related provinces; in in descending order, this incidence in Rovigo is 40.9%, 31.3% in Belluno, 30.5% in Venice, 23.6% in Vicenza and 16.8% in Treviso. These values are linked to multiple factors that concern both urbanisation of the region and the traffic and congestion of the road network, as well as the behaviour of road users; other useful variables are those related to demography, the vehicle fleet and the conformation and location of the various territorial areas.
With regard to circulating vehicles, it is interesting to look at the linear relationship between these and the number of urban accidents in the capitals. The data reveals significant deviations for two cities, namely Venice, with a number of accidents below the estimated value, and Padua, with a number of accidents higher than the estimate. While for Venice the deviation can partly be explained by the capillarity of the networks and the relative good use of public transport services, the situation in Padua is more complex and requires an in-depth analysis that considers all the factors at stake.
The economic scale of this phenomenon is given by the estimate of social costs of road accidents resulting in personal injury, i.e., the economic quantification of the main burdens on society as a result of these events.
In 2016, Veneto estimated social costs at almost 1.5 billion euros, which is a considerable figure; for the provincial capitals alone this estimate exceeds 286 million euros. The incidence of costs related to the injured on the total is very high, due to both the

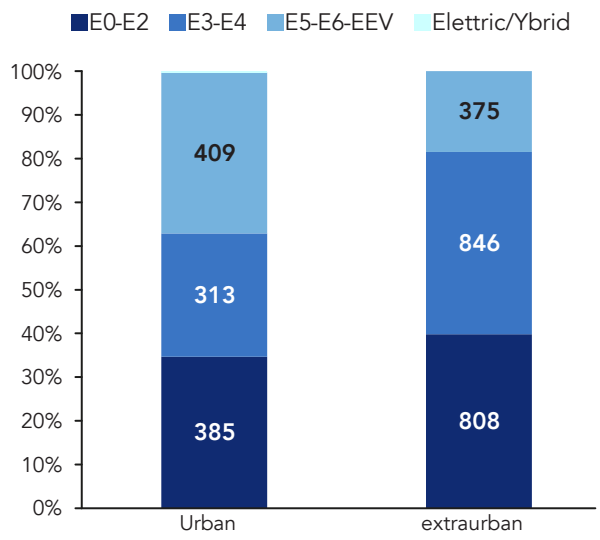
5 Injury rate = (Number of injured)/(Number of accidents)*100

Fig. 7.4.3 - Kilometre production in the presence of Electronic Ticketing Systems - Year 2017



Source: Processing by Regione Veneto, Mobility and Transport O.U.

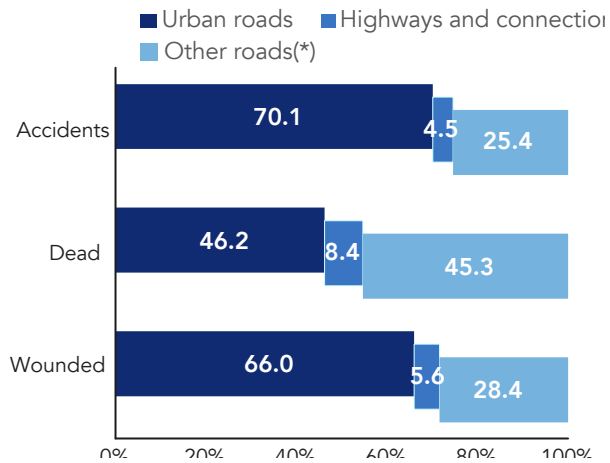
Fig. 7.4.2 - -% bus distribution by euro-class and type. Years 2016: 2017



Source: Processing by Regione Veneto, Mobility and Transport O.U.

number of injured persons and the consequences of injury, which sometimes entail serious temporary or permanent disabilities.
The policies put in place over the last fifteen years to limit accidents have generally had a good effect on quantity, severity and mortality. The result of these policies together with a greater protection of the person inside the vehicle has more than halved the number of deaths in accidents. However, if the mortality rate9 by Mortality rate = (Number of deaths)/(Number of accidents)*100 road user category is analysed, some road users are more exposed to serious injuries and death. In particular, among vulnerable users, i.e., those who are not protected by a passenger compartment, the most exposed user is the pedestrian, followed by motorcyclists, moped drivers and cyclists. While for vulnerable motorised users accident mitigation depends to a large extent on the adoption of personal protective equipment such as helmets and appropriate clothing as well as on prudent driving behaviour, for pedestrians and cyclists a more effective measure is to discourage the need for road access by increasing the safety of pedestrian crossings and cycle paths. In addition, it is interesting to note that, at regional level, the mortality rate of vulnerable urban users is also lower in the capitals than in the municipalities as a whole.
In the capitals of Veneto, the historical number of pedestrians involved in accidents on urban roads in the last sixteen years indicates a slight decrease, which is also noted in the relative mortality rate. In the same context, bicycles have a more variable trend: above all, there was a notable increase from 2004 to 2006, which became structural in the following years, while the cyclist mortality trend line shows a more marked decrease compared to that of pedestrians. From the data, therefore, it emerges that actions aimed at improving pedestrian and cycling mobility in the capitals seem to have paid off, which is more visible in cycling; however, the number of victims remains high, which must be considered. There are many possible actions to make progress in the field of sustainable mobility and to avoid these tragic events. This is just the aim of the framework law on cycling mobility, which allocates funds to the Italian Regional Authorities for making cycle paths, specific crossings with traffic lights, underpasses and overpasses specific for
Cyclists, for the safety of cycle paths and the creation of a network of protected cycle paths

Tab. 7.5.1 – Road accidents with damage to persons and injured in urban areas in the capitals and in all municipalities, with their percentage share - Year 2016



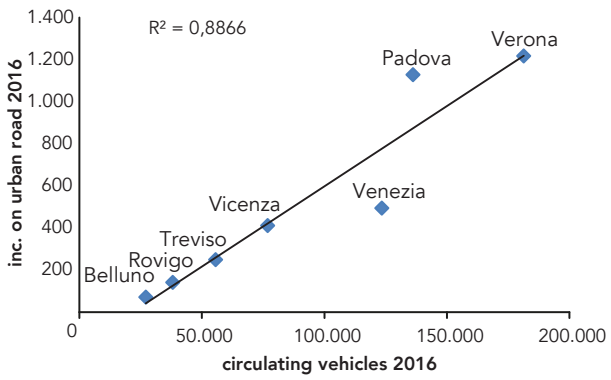
(*) The category Other roads includes state, regional and provincial roads outside the built-up area and suburban municipal roads.
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Tab.7.5.1 - Road accidents with damage to persons and injured persons in urban areas in the capitals and in all municipalities and related percentage share - Year 2016

	Accidents			Injured		
	Capital	Munic.	%	Capital	Munic.	%
Belluno	71	227	31,3	95	301	31,6
Padova	1.128	2.220	50,8	1.396	2.787	50,1
Rovigo	141	345	40,9	178	466	38,2
Treviso	249	1.483	16,8	306	1.978	15,5
Venezia	494	1.621	30,5	638	2.109	30,3
Verona	1.217	2.195	55,4	1.470	2.725	53,9
Vicenza	411	1.744	23,6	523	2.259	23,2
Veneto	**3.711**	**9.835**	**37,7**	**4.606**	**12.625**	**36,5**

FSource: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 7.5.2 – Relationship between the number of vehicles in circulation(*) and the number of urban accidents in the capital cities of Veneto - year 2016



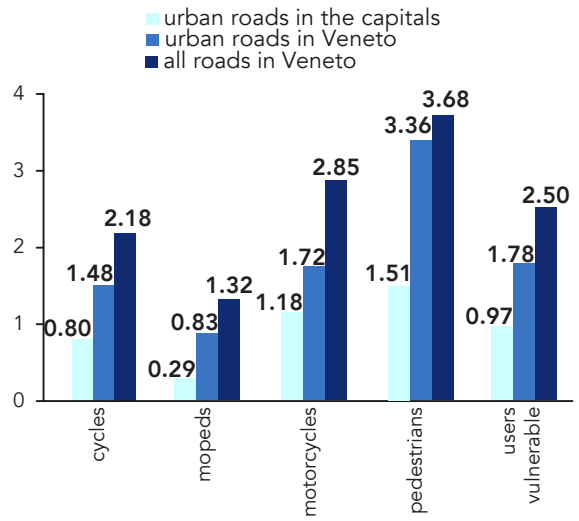
(*) According to the Italian Motorway Code, a motor vehicle is a vehicle equipped with an engine and at least four wheels and different from the motorcycle.
Source: Processing of data from ACI and Istat by the Statistics Office of Regione Veneto

Tab. 7.5.2 – Estimate of the social costs of road accidents with personal injury in Veneto - Year 2016

	Veneto	of which in urban areas in the capitals
Cost	€ 517.372.560,00	€ 51.135.660,00
for deaths	€ 808.156.098,00	€ 194.460.714,00
Cost for injured	€ 154.177.524,00	€ 40.769.046,00
Social cost of accidents with injured	€ 1.479.706.182,00	€ 286.365.420,00

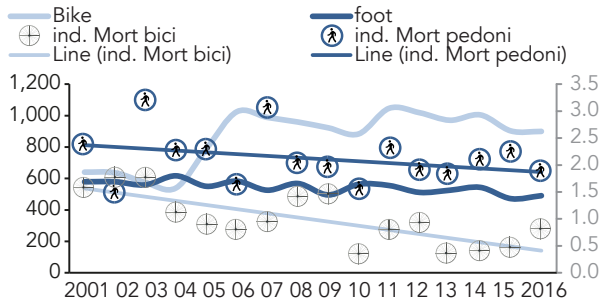
(*) The social cost of an accident is composed of health costs, human costs (biological and moral damage), costs arising from loss of production capacity, administrative and judicial costs and material damage

Fig. 7.5.3 – Mortality index(*) in accidents involving vulnerable urban users in Veneto - Year 2016



*(*)IMortality rate = (Number of deaths)/(Number of accidents)*100*
Source: Processing of data from ISTAT and Regione Veneto by the Statistics Office of Regione Veneto

Fig. 7.5.4 – Number of bicycles and pedestrians involved in road accidents with injuries per person in the urban area of the capitals of Veneto and relative mortality rates(*). Years 2001:2016



*(Source: Processing of data from ISTAT and the Ministry of Infrastructure and Transport by the Statistics Office of Regione Veneto ortality rate = (Number of deaths)/(Number of accidents)*100*

IL FOCUS
ANNO DEL CIBO ITALIANO

Chap. 8 - 2018 - The Year of Italian food

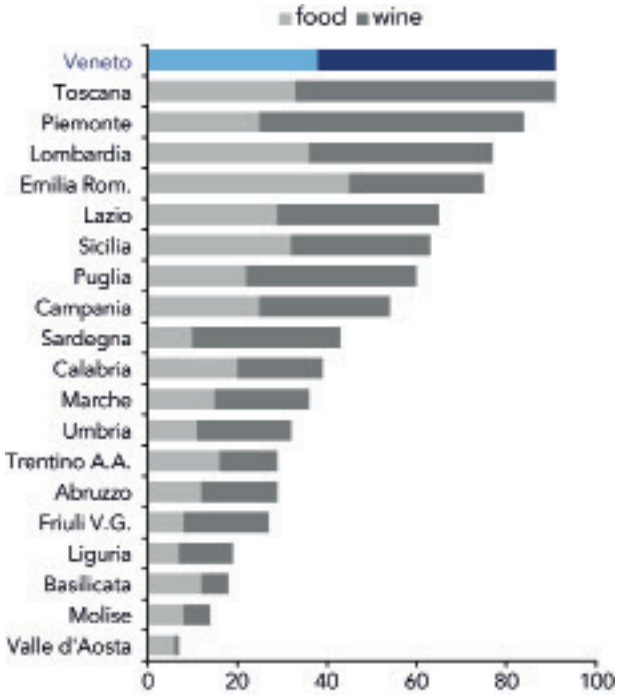
The year of Italian food offers the opportunity to learn more about the specialities of Veneto in the agri-food sector under the most varied facets, examining the region also from the point of view of landscape and tourism attractiveness, and trying to get to know the entire production chain, its actors and products

The current year has been named the National Year of Italian Food by the Ministry of Agriculture, Food and Forestry and the Ministry of Cultural Heritage and Activities and Tourism.
Italy holds the world record for the number of UNESCO recognitions, including for food, such as the Mediterranean diet, the Pantelleria vine tree, the Langhe Roero and Monferrato landscapes, Parma, the creative city of gastronomy and the art of Neapolitan pizza. The Veneto hills of Prosecco di Conegliano and Valdobbiadene are also competing for recognition.
The planned initiatives will have the aim of promoting and making known, from a tourism, history and landscape point of view, the enormous offer of extraordinary agri-food excellences that punctuate Italy, involving and promoting the production chains, starting from farmers, growers and fishermen to chefs and cooks, through to the fight against food waste. ENIT (Ente Nazionale Italiano per il Turismo, the Italian Tourist Board) and the network of Italian embassies abroad will be the spokesmen for the Italian identity by raising awareness of the indissoluble bond that exists between the food and wine and cultural heritage of our country.
After the great event of "Expo Milano", therefore, the agri-food experience returns to be widespread in Italy, to reaffirm the unity between food, landscape, identity and culture: all aspects that, in today's globalised world, cannot be delocalised or replicated, but can only be experienced and told, to become that enormous resource they represent for the development of local economies.
The Year of Food therefore offers, as Expo Milano also did, the opportunity to explore not only the food and agricultural specialities of Veneto in all their many facets, but also the beauty of its landscape, the particularity of its tourism offer, its quality products, the demand for these products abroad, the jobs this creates and the possibilities of work, the containment of food waste and also a focus on fishing, which is one of the many specialities of Veneto.

8.1 High quality products

The incredible wealth of landscapes, microclimates, traditions, histories and cultures that populate Italy is well represented by the variety of food products: as many as 818 products were awarded a GI1 certificate, which is a guarantee of absolute quality by attesting to compliance with strict production specifications; in 2017, other 4 products were certified as GI[1].

Fig. 8.1.1 – Number of GI certified food and wine products by region. Year 2017



Source: Processing of data from Ismea by the Statistics Office of Regione Veneto

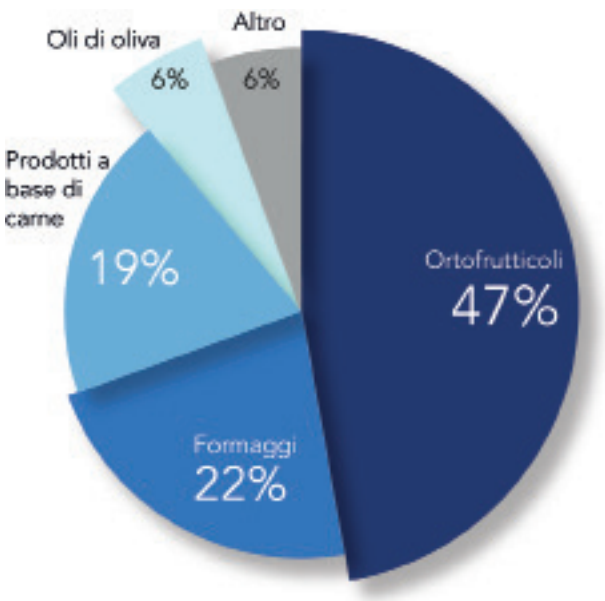
Italy boasts the world record and no rival is able to contend the title directly, since the second country is France, with 681 denominations, and the third Spain with 327. In Europe, GI certified products are almost 3,000 in total: 1,393 are food products and 1,586 are wine.
Among the Italian regions, it is Veneto, together with Tuscany, which
holds the absolute record with 91 GI certified wine and food products.
In 2016, in Italy GI products generated a production value of almost 15 billion euros, i.e., 6 percentage points more than in the previous year, and exports for 8.4 billion (+5.8% compared to 2015), representing 22% of the total agri-food exports.million euro production

Italy has the largest number of certified products in the world

1 These are the wine and food products.

value, represents 13% and 6% respectively of the national total: and if fruit and vegetables hold the largest number of PDO and PGI certificates, however, it is cheese that brings home the highest value in terms of turnover.
Berico-Euganeo, Salamini italiani alla Cacciatora, Sopressa Vicentina, Cozza di Scardovari, Asiago, Casatella Trevigiana, Grana Padano, Montasio, Monte Veronese, Piave, Provolone
Are produced which rank first place in the regional ranking by turnover: Asiago and Grana Padano.
Valpadana, Taleggio, Miele delle Dolomiti Bellunesi, Garda,VEneto, Aglio Bianco Polesano, Asparago Bianco di Bassano, Marrone di S. Zeno
Protected Geographical Indication (PGI): Asparago Bianco di Cimadolmo, Asparago di Badoere, Ciliegia di Marostica, Fagiolo di Lamon della Vallata

Fig. 8.1.2 – Distribution% of PDO and PGI products by category. Veneto - Year 2017



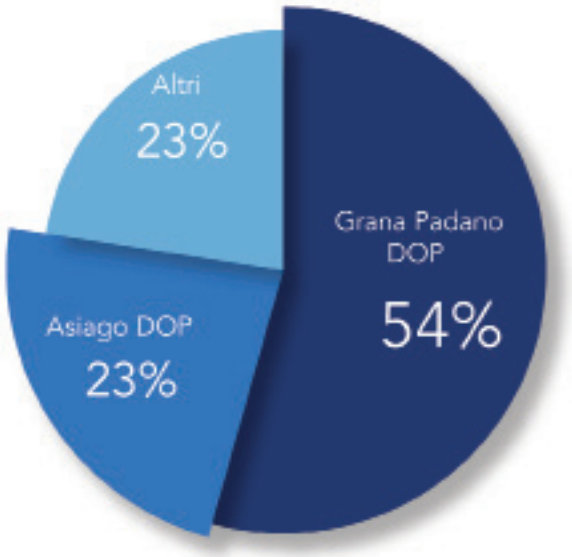
Source: Elaborations by the Statistics Office of the Veneto Region on Ismea dataa

Bellunese, Insalata di Lusia, Marrone di Combai, Marroni del Monfenera, Pesca di Verona, Radicchio di Chioggia, Radicchio di Verona, Radicchio Rosso di Treviso, Radicchio Variegato di Castelfranco, Riso del Delta del Po, Riso Nano Vialone Veronese, Cotechino Modena, Mortadella Bologna, Salame Cremona, Zampone Modena
Guaranteed Traditional Speciality (GTSs): Mozzarella, Pizza napoletana

The wine sector

Veneto, thanks to its 53 certificates, is the first region in Italy for the turnover from wine production: with 1.3 billion euros, it represents over 40% of the Italian total and ranks 5th among the top 10 provin-

Fig. 8.1.3 – % Distribution of turnover to the production of PDO and PGI products. Veneto - Year 2016

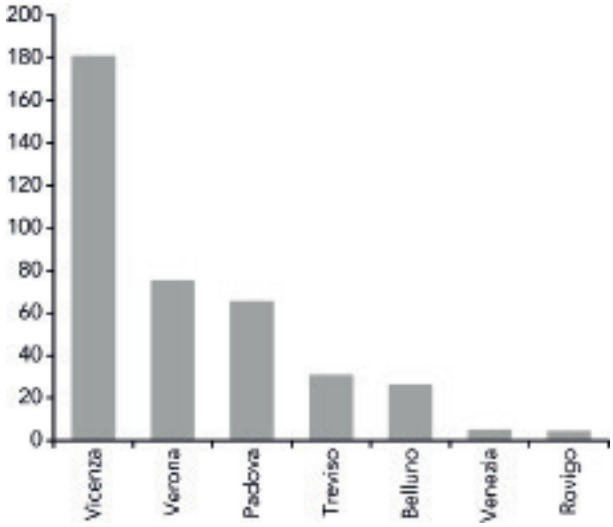


Source: Elaborations by the Statistics Office of the Veneto Region on Ismea data

ces in Italy.
The driving PDO [2]product behind this success is

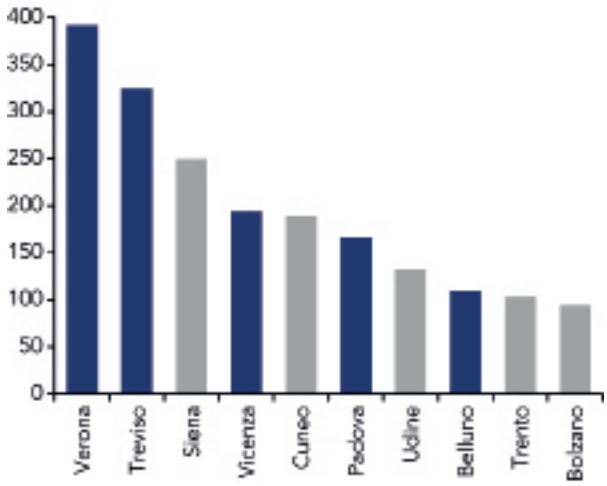
2 Protected Designation of Origin (PDO): Amarone della Valpolicella, Bagnoli Friularo, Bardolino Superiore, Colli Asolani
– Prosecco, Colli di Conegliano, Colli Euganei Fior d'Arancio, Conegliano Valdobbiadene – Prosecco, Lison, Montello rosso, Piave Malanotte, Recioto della Valpolicella, Recioto di Gambellara, Recioto di Soave, Soave Superiore, Arcole, Bagnoli di Sopra, Bardolino, Bianco di Custoza, Breganze, Colli Berici, Colli Euganei, Corti Benedettine del Padovano, Delle Venezie, Gambellara, Garda, Lessini Durello, Lison – Pramaggiore, Lugana, Merlara, Montello - Colli Asolani, Monti Lessini, Piave, Prosecco, Riviera del Brenta, San Martino della Battaglia, Soave, Val-

Fig. 8.1.4 – FTurnover from the production of PDO and PGI products by province. Veneto - Year 2016



Source: Processing of data from Ismea by the Statistics Office of Regione Veneto

Fig. 8.1.5 – Classifica delle prime dieci province italiane per fatturato alla produzione di vino DOP e IGP. Anno 2016



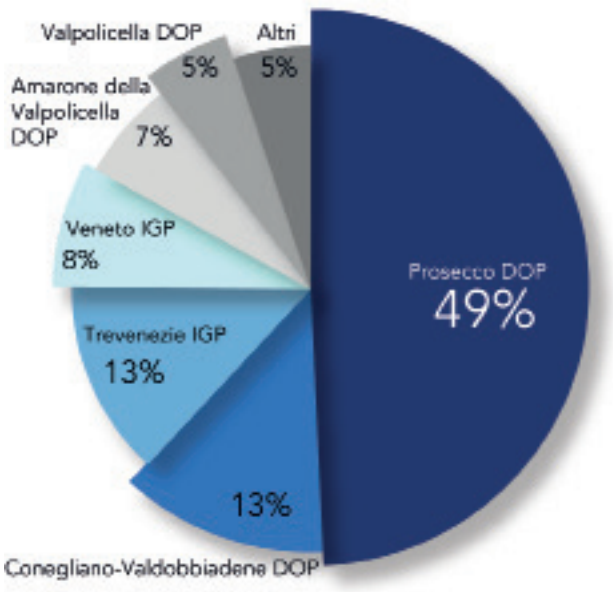
Source: Processing of data from Ismea by the Statistics Office of Regione Veneto

Prosecco, Prosecco, which ranks first in terms of both production in hectolitres and turnover. In second place, for both sizes, we find another Prosecco label, the Conegliano-Valdobbiadene: these two certified wines represent more than half of the economic value of the wine not yet bottled in Veneto, which qualifies our region's vocation for white wine.

Vicenza is the province with the highest turno-

The first red PDOs are Amarone and Valpolicella, which together account for 12% of the total.
The two PGIs Trevenezie and Veneto, which cover 21% of the regional total, are the first two PGIs in Italy for hectolitres produced and economic volume.

Fig. 8.1.6 – Distribuzione % del valore alla produzione del comparto wine. Veneto - Anno 2016



Source: Processing of data from Ismea by the Statistics Office of Regione Veneto

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dadige, Valdadige Terradeiforti, Valpolicella, Valpolicella Ripasso, Venezia, Vicenza, Vigneti della Serenissima Protected Geographical Indication (PGI): Alto Livenza, Colli Trevigiani, Conselvano, Marca Trevigiana, Trevenezie, Vallagarina, Veneto, Veneto Orientale, Verona, Vigneti delle Dolomiti

Organic products

The high quality of food is not only leading offer of the Italian food industry, but also the response to a need that is increasingly felt by consumers. The quality of food is therefore not only perceived as a production that follows processes governed by very precise rules, but also as an added value that recent trends towards a healthy, ecologically and ethically sustainable lifestyle are correlating to impact of the supply chain on the region and the wholesomeness of agricultural treatments. Initiatives such as "zero km" products, the short supply chain, the food traceability labels, and regulations such as that on organic and biodynamic food, are gathering more and more appreciation from both consumers and producers.

Italy is also among the top European countries in this case: it is the second in terms of agricultural surface area, behind Spain, with 1.8 million hectares of the total 12 million in Europe, and the first in terms of the number of operators in the sector with more than 70,000 people, including producers, processors, importers and exporters among the more than 350,000 Europeans.

The growth of organic farming in Italy has never stopped in terms of offer for years and 2016, compared to the previous year, marked an unprecedented record, with double-digit values for both agricultural surface area (+20.4%) and dedicated operators (+20.3%).

As for the surface area, it is concentrated in the regions of the South and the Islands, with Sicily in the lead (over 360 thousand hectares): the first four regions account for more than half of the Italian surface area and among these only Sardinia experienced a decline compared to the previous year, while all the others saw triple digit increases from one year to the next, as is the case of Campania (+144%).

Italy first region European for operators biological

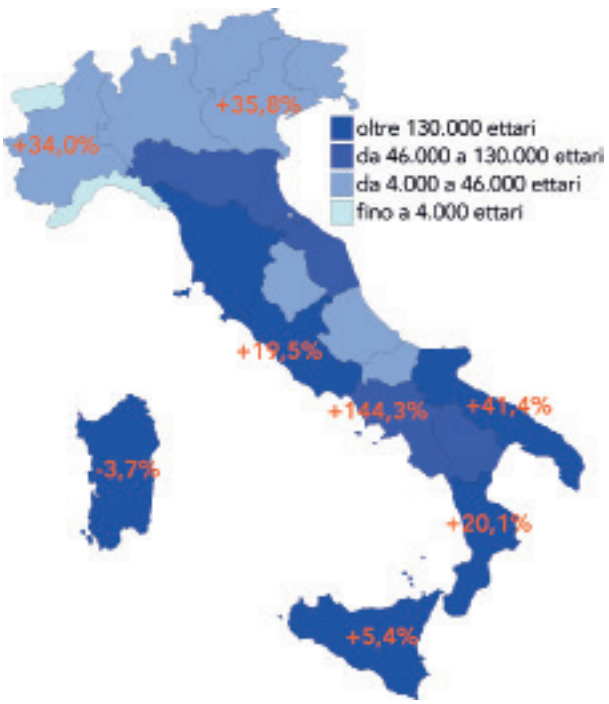
Veneto is also following a positive trend, increasing its organic surface area by 35 percentage points in one year and approaching 24 thousand hectares.

In Veneto, the largest area is dedicated to cereals, for almost a quarter of the total, followed by vines, with almost 5 thousand hectares, industrial crops and fresh fruit. In addition, Veneto is among the top six regions of Italy for the surface area invested in vines, corn and fruit.

Moreover, there are 15 of the 40 organic aquaculture farms present in Italy are in Veneto, on an equal footing with the nearby Emilia-Romagna.

The number of operators follows the same trend as the surface area and is growing at a double-digit rate reaching 72 thousand people at the national level in 2016: also in this case, the regions of Southern Italy have the highest number of total operators.

Fig. 8.1.7 – Organic surface area (ha) by region. Year 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

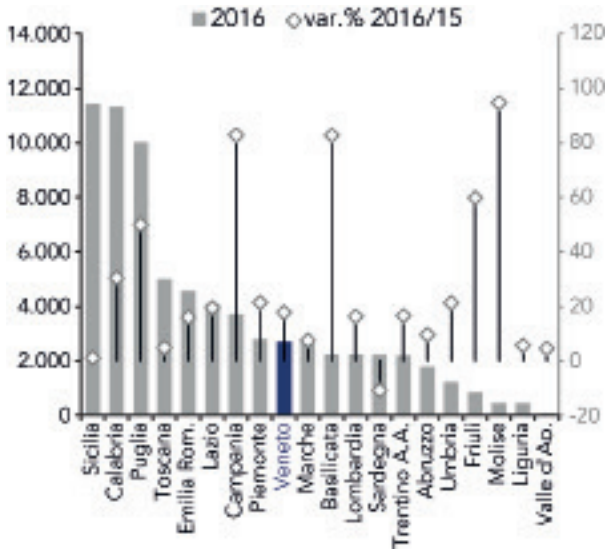
Veneto has almost 2,800 operators, with a growth of more than 17 percentage points between 2015 and 2016.

Considering the various types of operators, producers are concentrated in Calabria, Sicily and Puglia, while for the preparers the situation is reversed and the northern regions are those with the highest number: Emilia-Romagna, Veneto and Lombardy account for over a third of those who prepare or process agricultural products.

Veneto also gains a place on the podium with regard to importers of organic products, behind Lombardy and Emilia Romagna.

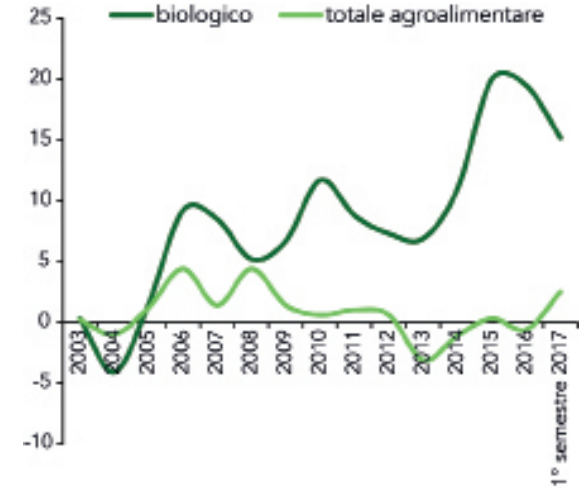
In the world of organic production, therefore, Italy

Fig. 8.1.8 – Organic operators by region and % change compared to the previous year. Year 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.1.9 – Annual consumption dynamics in value of fixed weight organic products in the large-scale retail trade and comparison with the total agri-food trend-% variation compared to the previous period



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

is synergistic, in which production is concentrated in the central South, while the industrial aspect is controlled by the northern regions.
In terms of consumption, the growing trend confirms the success of this market sector: between 2015 and 2016 the growth of organic products packaged in large-scale retail distribution was 20% and in the first six months of 2017, compared to the same period of the previous year, it was 15.2%, against a trend that for the total agri-food sector saw a decline (-0.6) between 2015 and 2016 and a recovery in the first six months of 2017 (+2.5%)
Fishing in Veneto: tradition and identity in support of coastal areas[3].
Due to bathymetry, fishing systems and fish species, the maritime fishing situation of Veneto is similar to those of the nearby Emilia-Romagna and Friuli Venezia Giulia, with which our region is part of the Northern Adriatic Fishing District.
In Veneto, in addition to professional or industrial fishing, there is also a large amount of small-scale fishing, commonly carried out in the sea along the coast and in the lagoon with gillnets. By definition, small-scale artisanal coastal fishing is carried out with boats that are less than 12 metres in length and typically with gillnets, driftnets, longlines, lines and harpoons, generally operating within 12 miles of the coast, as well as with other systems that are locally used in the coastal strip. Among the equipment normally used are pots, bertovels, coghill nets and traps, traditional tools used to fish cuttlefish, shrimps, schills, lobsters, lobsters, crabs, mullets, goby, plaice and octopus.
The average monthly expenditure for the purchase of seafood products for the Veneto-based family in 2016 was 34.90 euros and, even if in a very fluctuating manner, compared to that recorded in 2007, there was a ten-year variation of -1.1%. On average, a Veneto family spends 12.4% less on fish products than a typical Italian family.

The fishing fleet

The regional fishing fleet has seen a drastic reduction in the number of vessels over the last fifteen years, in particular due to EU policies aimed at reducing fishing activity in order to safeguard fish stocks and eco-sustainability.
The Veneto fleet represents 5.4% of the entire national fleet and is quite complex. In fact, it ranges

3 Edited by Veneto Agricoltura - Veneto Agency for Innovation in the Primary Sector.

from the typical turbo blowers dedicated to bivalve sea molluscs, to the so-called flying boats that operate in pairs and are typically dedicated to small pelagic fish, usually anchovies and sardines.
There is also a large number of trawling boats, both fast
and divergent, as well as an even greater share of small boats with gillnets and longlines for small fishing along the coast.
The current situation of the Veneto maritime fleet in 2017 counts 662 fishing boats.
The fleet has reduced over the last decade: -5.7% for tonnage, -8.3% for engine power, -14.7% in total length and, finally, -15.7% in the number of boats. On average, fishing vessels are over thirty years old. The fishing system with the largest numbers is that of the trawler, with boats that on average are larger. A further stratification of the Veneto maritime fleet has been made based on the origin of the boats: from north to south, Caorle, Venice, Chioggia and Polesine.
The largest number of vessels is found in Chioggia with 222 units, followed by Polesine and Caorle with about 160 units. The boats with higher tonnage are found in Chioggia, with an average gross tonnage of about 37 units. The same applies to the average engine power of fishing vessels, which in this case is about 197 kW. The Polesine fleet ranks second place for its average structural characteristics, similar to those of the Chioggia fleet, which is evidence of the strong presence of large boats in these areas that are suitable for flying or trawling. The boats in Caorle are the youngest on average (about 30 years), while the oldest are found in Polesine.

5,4% l'incidenza della flotta veneta sull'intera flotta nazionale

The regional maritime fleet usually also includes small boats,
known as class 5 boats, which are used in lagoon and maritime farming facilities. According to data from the Harbour Master's Office, in 2017 there were 21 units in the Venice District, all operating between the lagoon and off the coast of Pellestrina. The Chioggia Maritime District has a total of 84 boats, 6 of which operate in Porto Levante, 5 in Porto Tolle, 47 in Scardovari and 26 in Chioggia itself.

Tab. 8.2.2 – Veneto maritime fleet divided by origin of the boats. Veneto - Year 2017

Marineria di appartenenza	Numero barche	GT totale (unità)	Potenza Motore (kW)	Età media barche
Caorle	164	1.134	11.049	30
Chioggia	222	8.175	43.723	32
Polesine	169	1.942	15.683	36
Venezia	107	790	8.937	33
Totale	**662**	**12.041**	**79.392**	**33**

Source: Processing of EU Fleet Register data by the Social and Economic Observatory of Fisheries and Aquaculture

The production structure of Veneto fishing
The sea fishing industry, besides being rich in tradi-

Tab. 8.2.1 – Veneto maritime fleet divided by fishing system used. Veneto - Year 2017

Tipologia attrezzo di pesca	Numero barche	Lunghezza totale (m)	GT totale (unità)	Potenza Motore (kW)	Età media barche
Draga idraulica	164	2.153	1.820	18.013	30
Palangari fissi	67	444	153	1.854	35
Rete a strascico	201	3.548	9.566	51.965	29
Rete da circuizione (ciancioli)	16	116	33	571	37
Rete da posta	214	1.570	469	6.989	38
Totale	**662**	**7.830**	**12.041**	**79.392**	**33**
Variazione 2017/2008	-15,7%	-14,7%	-5,7%	-8,3%	-

Source: Processing of EU Fleet Register data by the Social and Economic Observatory of Fisheries and Aquaculture

tions and specialities, also has a complex fabric of businesses and workers.
The sector of primary production businesses in the last ten years has had a typical scissor-like trend. In fact, while fishing businesses have lost many units over time, those that are engaged in the farming sector show exponential growth. In recent years, however, there has been a certain trend reversal for fishing businesses, while those of aquaculture have settled in consistency, which is a sign that the primary production sector has found a balance.

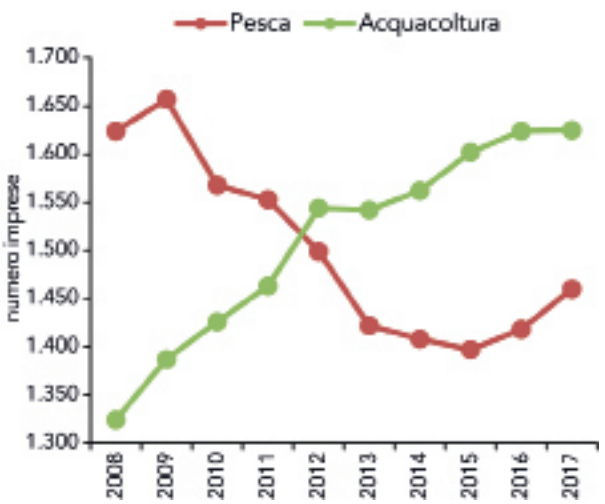
Close the navy with the greatest number of boats

In 2017, the entire regional fishing sector included 3,799 businesses operating in primary production, trade and processing or transformation of fish products. Veneto, with its 3,799 businesses, totals 15.4% of the total fishery industry of Italy.
Compared to the number of fishing businesses registered in 2009, that of businesses in the fishing, retail and itinerant trade of fish products was down, while the other businesses in the sector showed an increase ranging from +7.7% for those operating in the processing phase to +47.8% for those operating in the wholesale trade of frozen fish products.
The only provinces that have an outlet to the sea in Veneto are Rovigo and Venice, which are home to almost 89% of the regional fishing businesses. In Rovigo, there are 2,166 businesses, of which 63% operate in aquaculture and another 33% in fishing. In Venice there are 1,211 businesses in total, of which 55% operate in the fishing sector, and about 14% in the aquaculture and itinerant trade.
Veneto fishing industry businesses have different legal forms; among them, small local and artisanal enterprises prevail. In fact, of the total 3,799 businesses, 77% are sole proprietorships and about 15% are partnerships.
In Veneto, in the fourth quarter of 2017, a total of 7,058 people were working in the fishing industry, with an increase of 8.1% compared to 2014; this value indicated a certain economic liveliness in a regulatory context that is not always clear and simple.

in Veneto, 15.4% of companies in the whole national fish sector

Wholesale of frozen, deep-frozen, preserved and dried seafood products
The activities which employ the highest number of workers are those concerning fishing and aquaculture with about 1,800 units, while those operating downstream of the supply chain are all below 900 units. All sectors show positive variations in the 2014-2017 period, with the exception of a decline in the number of workers employed in the wholesale trade of processed products (-11.5%).
Sea fishing: tradition and innovation for the development of coastal areas Veneto currently has six active fish markets: Caorle, Venice, Chioggia, Porto Viro, Pila-Porto Tolle, and Scardovari. All the Veneto fish markets are production markets, i.e., they concentrate fish landing of the local fleet. Chioggia and Venice are exceptions, as they are mixed markets, because in addition to local fish products they also deal with those of national and foreign origin. However, while the Venice fish market is dominated by sales of products from abroad, in Chioggia the local landed market still maintains the majority of transits.

Fig. 8.2.1 – Fishing businesses operating in the primary production phase. Veneto - Year 2017



Source: Processing of Infocamere data by the Social and Economic Observatory of Fisheries and Aquaculture

Tab. 8.2.3 – Fishing businesses broken down by type of activity. Veneto - Year 2017

Tipologia delle imprese	Belluno	Padova	Rovigo	Treviso	Venezia	Verona	Vicenza	Totali	Variazione 2017/2009
Pesca	0	18	723	2	670	47	0	1.460	-0,1
Acquacoltura	9	14	1.363	26	172	21	20	1.625	0,2
Commercio all'ingrosso di prodotti della pesca freschi	1	10	26	6	71	10	4	128	0,5
Commercio all'ingrosso di prodotti della pesca congelati, surgelati, conservati e secchi	0	6	1	6	11	6	4	34	0,5
Commercio al dettaglio di pesci, crostacei e molluschi	3	30	11	19	98	15	17	193	-0,1
Commercio ambulante di pesci, crostacei e molluschi	2	63	19	32	164	14	9	303	-0,0
Lavorazione e conservazione dei prodotti ittici	0	2	23	1	25	3	2	56	0,1
Totale	**15**	**143**	**2.166**	**92**	**1.211**	**116**	**56**	**3.799**	**0,0**

Source: Processing of EU Fleet Register data by the Social and Economic Observatory of Fisheries and Aquaculture

Each of these fish markets has its own intrinsic characteristics, largely due to the type of fleet and the type of fish production they put on the market. For example, the Porto Viro market is characterised by a wide variety of freshwater fish, including crucian carp, carp and catfish, as well as fish from the nearby valleys. The Pila market, thanks to the large fleet of flying boats, is typically specialist in the sale of oily fish, most of which are sold at the quayside and then shipped directly by wholesalers to large-scale distribution retail outlets. For the remaining markets, the sales proposal is more varied, as the local fleet is also more complex.
In the last year, 19,223 tonnes of fish products were fished, with a ten-year decline of -17.2%, while the sales proceeds reached 50.1 million euros and a relative -10% net. All the quantities recorded in the various markets were down, ranging from -8.0% in Chioggia to -73.7% in Caorle. The strong decrease for Caorle is due to the removal of a substantial share of fishing vessels, which no longer provide their product to the fish market. In terms of turnover, the decrease ranges from -8.2% in Chioggia to -65.3% in Caorle. In contrast, Pila-Porto Tolle reported a net

Tab. 8.2.4 – Recorded fish product transits in the Chioggia and Venice markets - Year 2017

Settore	n. occupati 2014	n. occupati 2017	var. % 2017/14
Occupati nella pesca	1.744	1.826	0,0
Occupati nell'acquacoltura	1.707	1.815	0,1
Occupati nella lavorazione	775	850	0,1
Occupati nell'ingrosso prodotti freschi	676	875	0,3
Occupati nell'ingrosso prodotti lavorati	192	170	-0,1
Occupati nel commercio al dettaglio	676	682	0,0
Occupati nel commercio ambulante	761	840	0,1
Totale	**6.531**	**7.058**	**0,1**

Source: Processing of Inps/Infocamere data by the Social and Economic Observatory of Fisheries and Aquaculture

Caorle, Venice, Chioggia, Porto Viro, Pila-Porto Tolle, and Scardovari the Venetian fish mar-

increase of 30.0% in sales proceeds.

By analysing the composition of the local landings, of the total 19,223 tonnes of fish product, oily fish alone represent 55% of the total. In detail by species, in first place are sardines with 5,753 tonnes, followed by anchovies (4,821 t) and clams (1,572 t). Further on are mussels (1,337 t), mullets (938 t) and cuttlefish (672 t).

As far as the average price of the local fish product from Veneto is concerned,

in the last year it was equal to 2.60 Euro per kg, which if compared with the previous year shows a decrease of

-4.2%, while if compared with 2008 it shows an increase of +8.7%.

The Chioggia and Venice fish markets also saw a significant flow of products from Italy and abroad. In 2017, the total transits in Chioggia was 11,422 tonnes, with a 10-year decrease of -14.6%. All the sales shares are decreasing, of which the local product represents almost 82%, while the national and foreign shares are 8% and 10% of the total respectively. In monetary terms, the turnover was 37.5 million euros, of which 61% was generated by the local fish product alone and was down by -17.5%. In Venice, the total transits in the last year amounted to 8,430 tonnes, with a long-term loss of -17.1%. The share of products of foreign origin represents about 61% of the total transits and is the only one to be stable in the ten-year comparison (-0.8%). Market turnover, with 58.1 million euros in 2017, is up by +2.2% thanks to the increase in foreign products (+29.8%), while national and local seafood products are falling, quite dramatically.

Another typical and traditional sector for sea fishing in Veneto is that of bivalve sea molluscs, which are

the blue fish represents 55% of the total of the local landed

commonly fished by hydraulic dredgers or turbo blowers. The fleet has 86 active vessels in Venice and 77 in Chioggia. These dredgers belong to two categories, depending on the main product caught, 102 units are dedicated to the fishing of sea clams, while the remaining 61 boats are dedicated exclusively to the collection of cockles.

The most important species is the sea clam or lupine, from the Chamelea gallina species which, in 2017, produced 4,692 tonnes and achieved a ten-year increase of +31.5%. The cockle (Callista chione) however, recorded a production of 852 tonnes and a ten-year loss of 24% net, a controlled decrease

Tab. 8.2.5 – Produzione locale sbarcata nei mercati ittici regionali. Veneto – Anno 2017

Mercati	2017 (ton.)	2008 (ton.)	Var. % 2017/08	2017 (mln. €)	2008 (mln. €)	Var. % 2017/08
Caorle	157,7	600,7	-0,7	1,0	2,8	-0,7
Chioggia	9.319,7	10.130,6	-0,1	22,9	25,0	-0,1
Pila-Porto Tolle	7.793,4	8.960,3	-0,1	15,4	11,8	0,3
Porto Viro	404,8	451,9	-0,1	0,9	1,1	-0,1
Scardovari	251,9	478,6	-0,5	0,8	1,4	-0,4
Venezia	1.295,9	2.591,7	-0,5	9,0	13,5	-0,3
Totale	**19.223,5**	**23.213,9**	**-0,2**	**50,1**	**55,6**	**-0,1**

Fonte: Elaborazione dell'Osservatorio Socio Economico della Pesca e dell'Acquacoltura su dati dei Mercati Ittici veneti

Tab. 8.2.6 – Transiti di prodotti ittici registrati nei mercati di Chioggia e Venezia – Anno 2017

Mercati	2017 (ton.)	2008 (ton.)	Var. % 2017/08	2017 (mln. €)	2008 (mln. €)	Var. % 2017/08
Chioggia	11.422,1	13.380,1	-0,1	37,5	45,4	-0,2
di cui prodotto locale:	9.319,7	10.130,6	-0,1	22,9	25,0	-0,1
di cui prodotto nazionale:	966,9	1.594,9	-0,4	7,0	10,2	-0,3
di cui prodotto estero:	1.135,5	1.654,6	-0,3	7,6	10,3	-0,3
Venezia	8.429,8	10.169,7	-0,2	58,1	56,9	0,0
di cui prodotto locale:	1.295,9	2.591,7	-0,5	9,0	13,5	-0,3
di cui prodotto nazionale:	2.010,7	2.414,4	-0,2	10,3	13,4	-0,2
di cui prodotto estero:	5.123,2	5.163,6	-0,0	38,8	29,9	0,3

Fonte: Elaborazione dell'Osservatorio Socio Economico della Pesca e dell'Acquacoltura su dati dei Mercati Ittici veneti

to keep the unit price of production constant over time (about 4.50 Euro/kg) and protect the resource. Until a few years ago, razor clams (Ensis spp. and Solen Marginatus) were also commonly fished, but fishing has been banned following the introduction of the Mediterranean Regulation, which restricts the fishing of certain fish species off the coast. However, for some years now, the fishing of sea worms or peanut worms (Sipunculus nudus), to be used as bait for sport fishing, has become more and more popular: in 2017, about 8 tonnes were collected, thus supplementing the income of clams.
Fishing with gillnets is also of a certain importance and requires, for their use, a licence from the Harbour Master's Office of the Maritime Departments of Venice and Chioggia. There were 262 licences issued in spring 2017. In Chioggia authorisations were issued for the setting of pots and creels for a total of 27,000 units, and a licence has been issued for the positioning of coghill nets on an experimental basis. 96 businesses that have been authorised to carry out gillnet fishing in Chioggia, 4 of which are used for sporting purposes.
However, in the maritime area of Venice, authorisations granted for gillnet fishing in 2017 allowed the positioning of 53,100 pots. Furthermore, in the Venice lagoon, in addition to the pots, there are the characteristic coghill nets called "reoni", with 54 stations scattered along the shores and inlets of port. About 10 businesses, most of which are cooperatives based in Venice, own the 54 licences granted for reoni and operate with a fleet of 22 boats.

The farming of fish products

A flourishing and emerging sector of Veneto fishing sector is undoubtedly aquaculture, which consists of lagoon clam farming, mussel farming and fish farming.
Lagoon clam culture has been present for over thirty years, since the introduction of the Philippine clam (Tapes philippinarum) in the Venice lagoon, and represents the richest item of Veneto's total production, which is accompanied by a residual production of the cross-cut carpet shell (Tapes decussata).
All the clams in the world
are farmed in Europe, with 36,636 tonnes produced in 2015, 99% of which came from Italy and the rest from France and Spain. At the time, Veneto alone accounted for about 43% of Italian production, with the remainder was in the upper Adriatic between Sacca di Goro and Laguna di Grado and Marano Lagunare. In 2016, an estimated 13,030 tonnes of Philippine clams were produced, showing a decade-long decrease of
-11.1%. The two preferred areas for the production of clams are the Venice Lagoon and Chioggia to the north and the Po River Delta to the south, where 78% of the regional production is concentrated.
Mussel farming, using the Mytilus galloprovincialis species, is also flourishing in Veneto and is mainly carried out in long line farms situated in areas granted by Veneto. A smaller proportion is still farmed in the lagoon on wooden poles. Typical production areas the Venice Lagoon, the area overlooking Pellestrina and the Po River Delta area. In 2017, the production of mussels or peoci amounted to 20,561 tonnes, with a ten-year variation of +31.6%. About 81% of the production is carried out in the open sea, while the rest comes from lagoon farms. Almost 61% of the total production of mussels comes from the Polesine area. There are currently 41 mussel farms in Veneto, 22 of which are in Venice and the remaining 19 in the Po River Delta area, accounting for 70% of the 4,035 licensed hectares.
Fish farming complements the total production of the Veneto aquaculture sector, with more than a hundred businesses operating in farming on inland freshwater or valley areas. In 2016, Veneto alone represented 17.8% of total national production, while in terms of Gross Saleable Production (GSP) it was 15% net.

aquaculture a flourishing and emerging sector of the Venetian fish farm

The total regional production of fish farming in 2016 stood at about 10,150 tonnes, with a ten-year loss of -17.2%. Trout, with 7,600 tonnes, represents about 75% of the total regional production and almost 21% of the national production of this species. With 24 million euros of GSP, however, the percentage of their total amounts to about 61%. In addition to trout, the total production of the sector is supplemented by eels (100 t), valley mullets (500 t), sturgeons (650 t), salmonids (500 t), freshwater species (carp, perch, catfish with 200 t) and, finally, marine species (sea bream, sea bass with 600 t), all farmed in 105 plants in Veneto.

The international trade of Veneto seafood products
The international trade balance of Veneto for unal-

tered fish product transactions, i.e., excluding processed and manufactured fish products, is largely negative. In 2017, the regional foreign balance was negative by 262 million euros. In fact, 56.8 million euros of fish products are exported against imports totalling 318.8 million euros.

Quite different numbers are recorded when, in addition to fish, international transactions of processed and/or manufactured products are also taken into account. In fact, in 2016 exports to Veneto amounted to almost 115 million euros, while imports rose to almost 918 million Euros. The countries of destination for Veneto fish products are Germany, France, Austria and Spain, while for incoming products there are Spain, Denmark, Germany and Poland.

The excellent fish products of Veneto

There are many typical and excellent products from the Veneto fishing industry which invade national and foreign markets and kitchens on a daily basis. Whether produced in moderate quantities or in large volumes, they are all sought after for their nutritional value and organoleptic properties, but also for their ability to create unique dishes in the kitchen. Some of these products are available on the market throughout the year, while others have their own typical seasonality and can only be purchased in a few months of the year.

Among other things,Veneto fish species

Also include the Cozza di Scardovari PDO mussel. With

A Ministerial Decree of 18 July 2000, the Ministry of Agriculture included the "Cozza di Scardovari" mussel and the "Vongola del Polesine" clam in the register of traditional Italian products.

Thanks to the production process and management system and the Po River Delta natural environment, these products have exceptional organoleptic and nutritional characteristics, as the molluscs are less stressed, intact and preserve greater freshness.the last three years managed to take the lead in the ranking, and now comes second with 6.6 billion euros, just behind Lombardy which, with almost 7 billion euros and a growth of 15.8%, experienced a real feat in the last year considered.

In third place is Emilia Romagna with € 6.3 billion.

Tab. 8.2.7 – Foreign trade balance of fish products. Veneto - Year 2017

Province	Export (mln €)	Var. % 2017/08	Import (mln €)	Var. % 2017/08	Saldo (mln €) 2017
Belluno	0,0	-0,9	0,2	6,2	-0,2
Padova	0,1	6,5	6,0	0,1	-5,9
Rovigo	21,7	0,1	79,2	0,3	-57,5
Treviso	2,6	0,8	21,6	11,3	-18,9
Venezia	31,0	0,3	182,8	0,3	-151,7
Verona	1,3	-0,2	28,2	1,3	-26,9
Vicenza	0,1	0,2	0,9	0,8	-0,8
Totale	**56,8**	**0,2**	**318,8**	**0,4**	**-262,0**

Source: Processing of Istat data by the Social and Economic Observatory of Fisheries and Aquaculture

8.3 Agri-food exports: the continuous creation of products that cannot be relocated

During 2017, Italy broke another record for the export of agri-food products[4], exceeding 41 billion euros, with an increase of almost 7 percentage points compared to the previous year. Considering the growth in the last 5 years, however, it is Veneto that has had the best performance: in fact, with an average annual growth of 6.8 percentage points, it performs better than its main competitors and the Italian average.

Each Italian region has its own best-seller that reflects the characteristics of its supply chain and its specialisations both in agriculture and in the food industry: Sicily, Basilicata, Puglia, Umbria and Trentino mainly export fresh fruit and vegetables (oranges, grapefruit, apples, vegetables); Campania and Calabria are specialist in transformed vegetables and fruit (tomato sauce, etc.); Lombardy, Piedmont, Friuli, Marche and Lazio focus on transformed products such as sugar, the, coffee, cocoa and spices, Veneto; Tuscany, Abruzzo and Val d'Aosta are the regions of wine and other drinks, while Emilia Romagna is the specialist in meat products (ham, sausages), Liguria in olive oil and Sardinia in

the "Cozza di Scardovari" and the "Vongola del Polesine" included in the register of traditional

4 Products are considered of the food, agricultural, forestry and fishing industries.

Tab. 8.2.8 – The fish excellences of Veneto: name, production (t) and average production price (euro/kg) - Year 2017

Denominazione	Produzione 2017 (t)	Prezzo medio alla produzione (euro/kg)
Pesci		
Alice (Engraulis encrasicolus), Sardon	4.821	1,29
Sardina (sardina pilchardus), Sardela	5.753	0,71
Latterino (atherina boyeri), Anguela	179	6,34
Passera (platichthys flesus), Passarin	4	8,75
Triglia di sabbia (Mullus barbatus), Barbon	190	3,03
Molluschi		
Canestrello (Chlamys spp.), Canestreo	139	3,37
Fasolaro (Callista chione), Fasolaro	852	7,55
Seppia (speia officinalis), Sepa	672	6,9
Vongola di mare o lupino (Chamelea gallina), Bevarassa	4.692	4,01
Vongola filippina (Tapes philippinarum e Tapes spp.), Caparossolo	13.030	6,6
Crostacei		
Moleca (Carcinus Aestuarii), Moeca	15	38,21
Pannocchia (Squilla mantis), Canocia	425	6,37

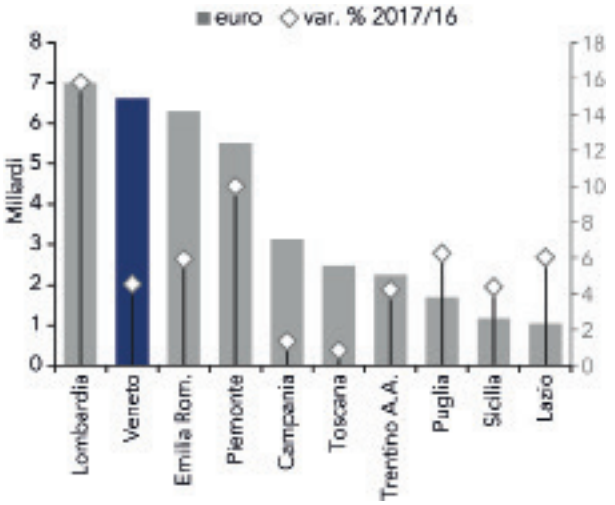
Source: Processing by the Social and Economic Observatory of Fisheries and Aquaculture

cheese.
The geography of the commercial partners also varies according to the product's region of origin. In fact, considering Italy's top 10 partners, Veneto is the first region in terms of value of goods exported to as many as 3 of them: Germany, which is also Italy's first partner in absolute terms, the United Kingdom and Austria, representing 18.7%, 21% and 32.7% respectively of the value of national exports to these countries.
Lombardy is the leading region in 5 out of 10 countries, beating the record in Japan where it represents over 50% of Italian exports and also beating, in addition to Veneto, Tuscany and Piedmont, which rank first in the United States and France respectively .

€ 6.6 billion exported from Veneto, the second region of Italy

As for the products exported from our country, Veneto is the first Italian region for 5 products among the 19 categories considered: there is no other region that does better, as Lombardy ranks first with 4 products (baked goods, milk and cheese, tobacco and preserved fish) and Piedmont and Tuscany for two, i.e., sugar, coffee, cocoa, spices and starches and grains for the former and oils and live plants for the latter.

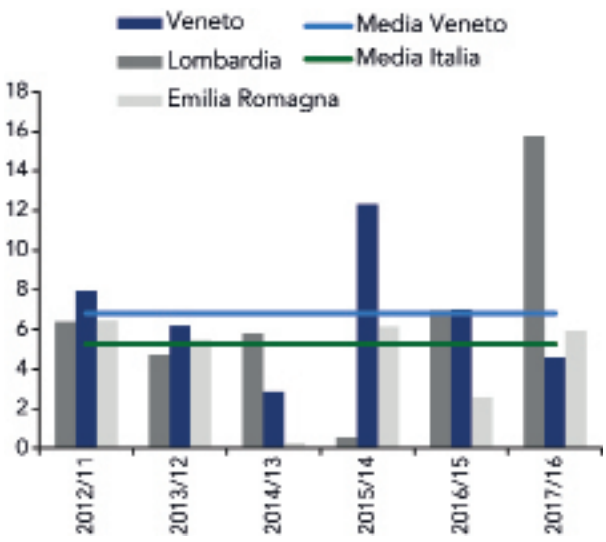
Fig. 8.3.1 – Agri-food exports (euros) for the first ten regions - Year 2017 and % var. compared to 2016



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

The Veneto-branded best-sellers are wines and other beverages, which are also the Italian product with the highest value ever, vegetables, as well as animal feed, fresh fish and raw wood products: for each of these products Veneto holds a percentage share of the national total that is always above 20%.
By analysing Veneto's exports for the two macro-categories "food industry" and "agriculture, forestry and fishing", it is clear that these are

Fig. 8.3.2 – Agri-food exports: % variation compared to the previous year for the top regions and average for the period. Veneto and Italy - Years 2011:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.3.3 – Products exported by region - Year 2017

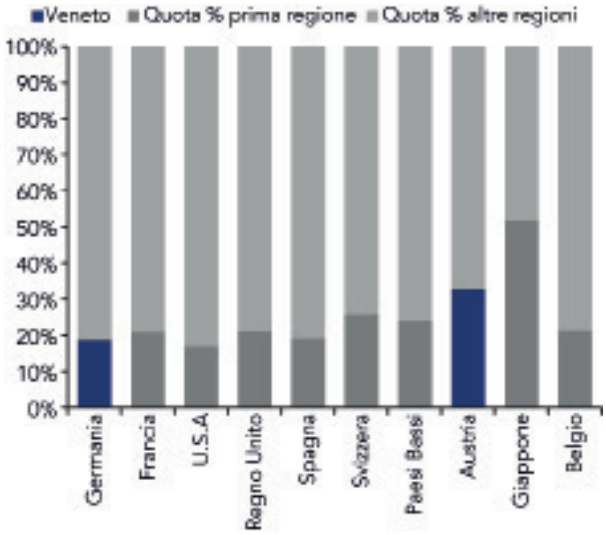
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

processed products that benefit from having a greater added value and therefore achieving a greater final export value. Veneto's specialisation in wines and other beverages fears no comparison with other products: in 2017, 2.4 billion were exported, an increase of almost 7 points compared to the previous year, and it is necessary to add the next 4 products in the ranking to obtain a similar value!

The first product in the agriculture, forestry and fishing macro-category is vegetables, followed by fresh fruit, both growing by 7.9 and 2.7 percentage points compared to the previous year.

As for the importers of Italian products, Germany

Fig. 8.3.4 – Ranking of the top 10 partner countries by value of agri-food exports and % share of the first exporting region in the total. Italy - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

is the best client of both Italy and Veneto: for many years it has ranked first, intercepting almost 20% of the value of our agri-food exports, slightly up compared to 2016 (+0.5%) and totalling +12.2% compared to 2013. Veneto best-sellers in Germany are wine, meat products and fresh fruit.

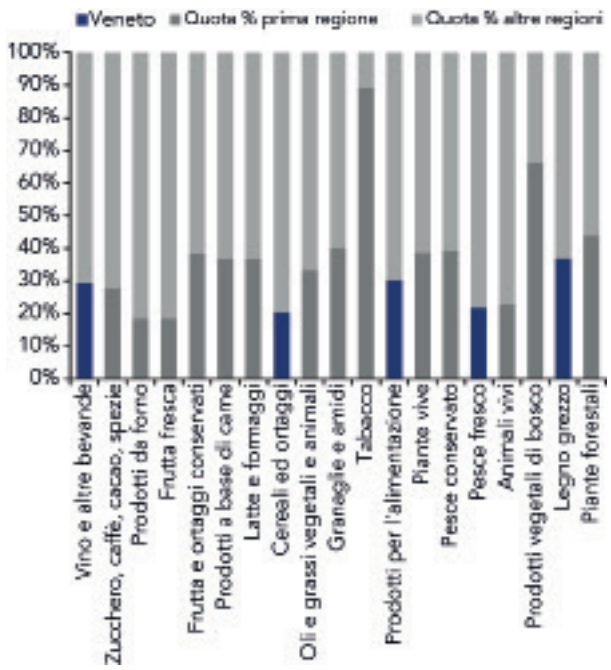
As regards the most important commercial partners of Veneto, with respect to 2016, they are all growing compared to the previous year and also

with respect to 2013, with the sole exception of Russia, which has almost halved imports from our region compared to the previous 4 years, but started a in clear recovery in 2016 (+11.9%).
The 2017 Spain grew significantly by 22.4% compared to 2016 and by 80.8% compared to 2013: our best-sellers over there are sugar, coffee, cocoa, tea, spices, meat-based products and baked goods.
France also recorded a double-digit growth (+15.5%) from one year to the next and +47.2% in the five-year period considered: the first two best-selling products are the same as in Spain, while in third place is wine.

Wine exports

Wine, which is the best-seller in 7 of the top 10 countries considered, is now recognised as the leading product

Fig. 8.3.5 – Ranking of food products by value and% share of the first exporting region. Italy - Year 2017

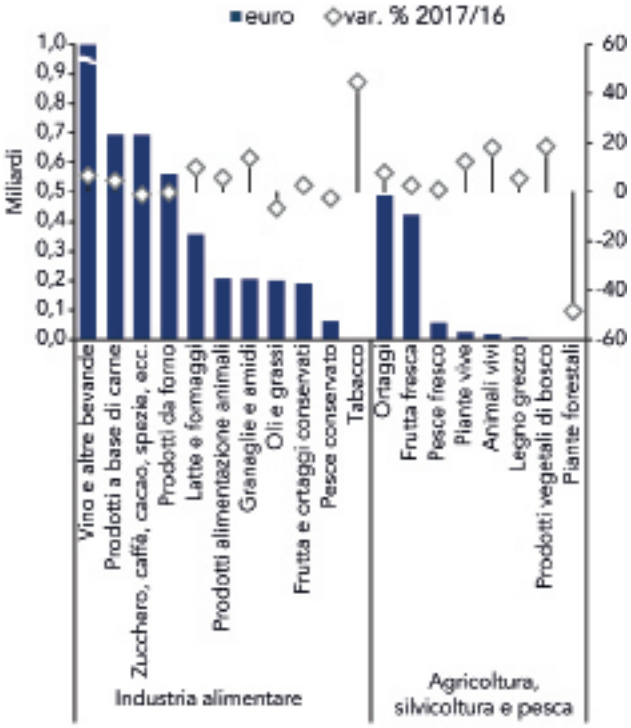


Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

for Veneto exports: during 2017 a new record was broken with 2.1 billion euros, up 6.4 percentage points compared to 2016 and representing over 35% of the national value as the first exporting region in Italy. The performances of Puglia (+21.5%), Abruzzo (+13.4%),
Emilia Romagna (+11.3%) and Sicily (+10.3%) are remarkable compared to the previous year.
Partner countries confirm last year's top position: the UK maintains the lead with almost 430 million euros, up 3.6 points, followed by the USA with almost 420 million, up by almost 12 points, and Germany, which repeats last year's result with 335 million euros (+0,7%). The Nordic countries of Denmark, the Netherlands and Norway are down, while the growth of China (+42.7%), France (+27.5%) and Russia (+20.5%) is surprising.

Lead product wine of Veneto exports with 2.1 billion euros

Fig. 8.3.6 – Agri-food exports (euros) by category and product and % variation compared to the previous year. Veneto - Year 2017

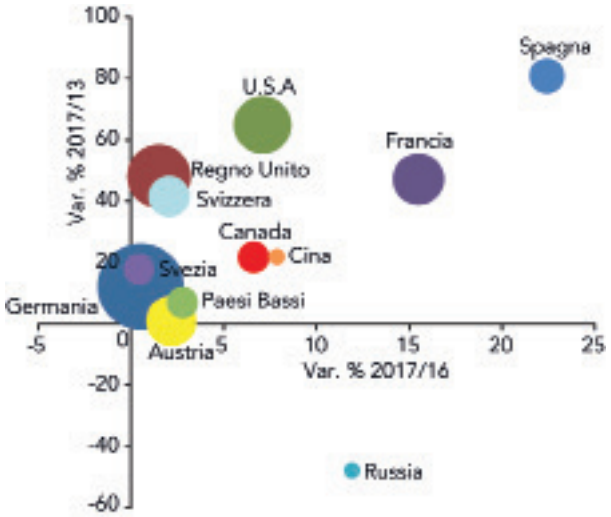


Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

With regard to the types of wine exported, bottled wine, which accounts for more than half of the total

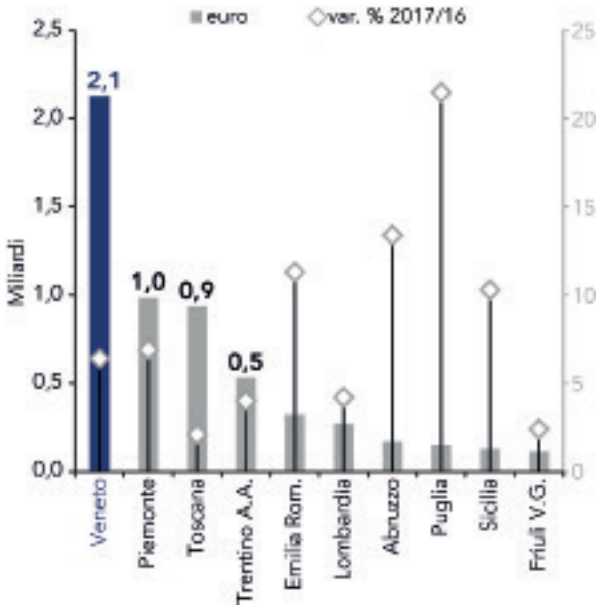
(56%), grew moderately compared to the previous year (+1.3%), while sparkling wine, which now accounts for 38% of our wine exports, continued its remarkable growth (+15.9%), while bulk wine lost more than 5 percentage points.
Even when considering the last 5 years, the performance of sparkling wine proves to be the best: its growth is constantly in double figures and decidedly higher than that of the wine considered as a whole.
In addition to the United Kingdom with almost 38% of Veneto sparkling wine export (+11,6% compared to 2016), in 2017 this type of wine sold very well in several other countries: considering the first 20 partners, only exports to Norway did not grow (-0,3%), while China had a great performance (+96%), as well as English-speaking countries such as Australia (+51,2%), Canada (+26,6%) and the United States (+24%), plus Finland (+35,1%), France (+25,4%) and Russia (+41%). In the long term, the growth is even more amazing: since 2012, among the top 20 partners, none has grown less than 20%, but there are also those who have increased their value fivefold, such as the United Kingdom, Poland and France. This success is due mainly to Prosecco: from 2017 a new product code has been established for PDO Prosecco Spumante, as has been the case for other types of sparkling wine, such as Asti PDO and Champagne. For the first time it is therefore possible to quantify the weight of this product on the export of Veneto wine.
During 2017, 665 million euros were exported, equal to 31.3% of the total value of exports for Veneto wine and 82.5% of exports of regional sparkling wine: as for sparkling wines in general, Prosecco confirms its distribution by country, where the United Kingdom once again takes the largest share, 43%, followed by the USA (22%) and Germany (6%).
PDO Prosecco Spumante also manages to get a better price, both compared to the average price of wines and compared to its own category: in fact, bottled wine is sold at an average price of 3.2 euros per kg and sparkling wine at 3.8, and Prosecco is sold at an average price of 3.9, with the highest value among the of products that, according to a method that has been consolidated for several years now, incorporate a high level of quality7.
These products combine the ancient tradition of Veneto know-how with innovation in production

Fig. 8.3.7 – % share of exports by country, % variation compared to the previous year and compared to 2013. Veneto - Year 2017



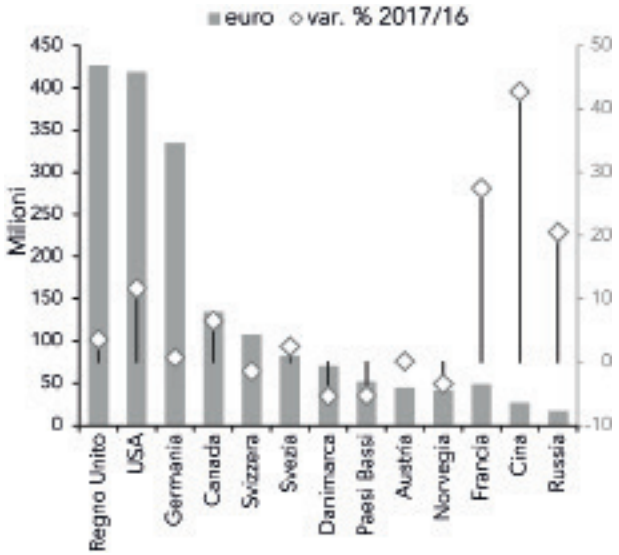
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.3.8 – Wine exports: top ten Italian regions (euro) and % variation compared to the previous year. Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.3.9 – Wine exports (euros) for the first partner countries and % variation compared to the previous year. Veneto - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

techniques and represent one of the pillars of the local production system, a heritage that must be supported and enhanced to strengthen the region's position on international markets. Between 2014 and 2016, the three-year period covered by this study, these productions have achieved brilliant results on foreign markets, demonstrating to be useful tools to convey worldwide the excellence of the Veneto food industry as well as, with a cascading effect, of the entire production system of the Veneto, with a unified vision aimed to promote the Made in Veneto products.

The best performance it's sparkling wine

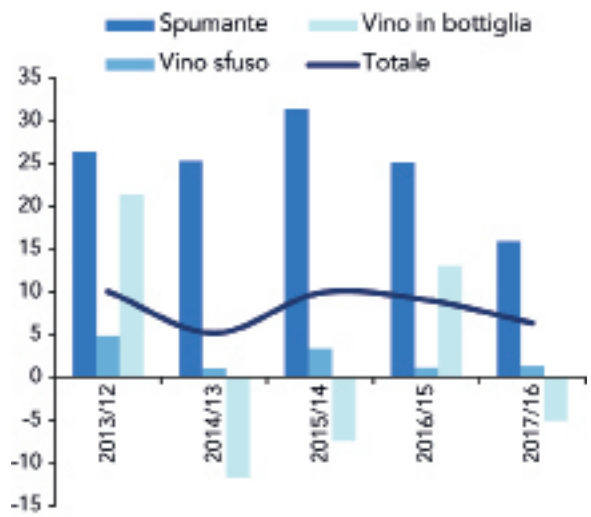
Veneto "Good Products" have been worth 3.7 billion in the last three years

As we will see in detail later, exports of Veneto "Good Products" have increased more than the national average, and their weight

top 20 partners in Canada, with more than 5 euros per kg.

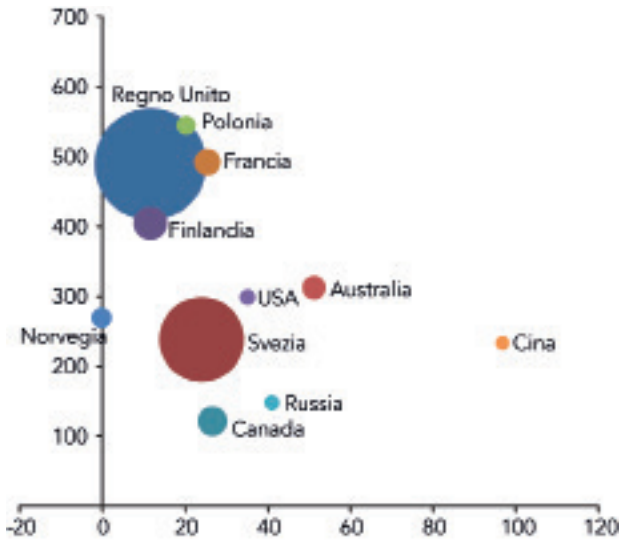
The Veneto "Good Products" conquer internatio-

Fig. 8.3.10 – -% variation in wine exports by type compared to the previous year. Veneto - Years 2012:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.3.11 – -% share of sparkling wine exports to some countries, % variation compared to the previous year and compared to 2012. Veneto - Year 2017

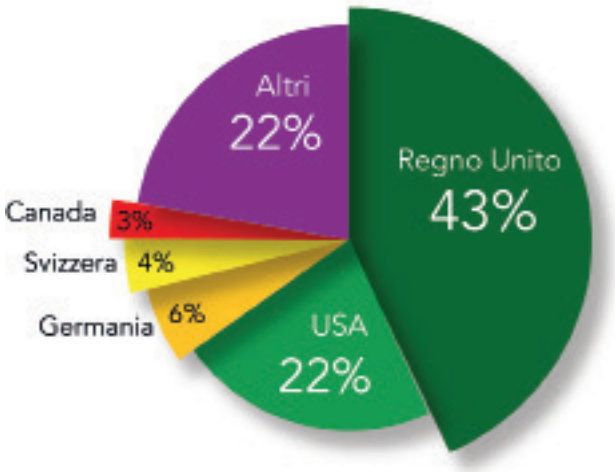


Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

nal markets[5] 64% of Veneto's exports of agricultural and food products are made up on world demand has therefore increased. Moreover, Veneto has been able to intercept the demand for quality of foreign consumers: the market share of the region, in fact, has increased in almost all the main importing countries for this sector. This result is anything but obvious.
A first obstacle, however, is competition. The ability to direct consumers towards products that are worth paying a premium price for may be weakened by the availability of lower quality but cheaper substitutes.
This can happen especially[6] in those areas where

5 This paragraph has been written in collaboration with Prometeia.
6 The selection of quality products that, starting from a very detailed sectoral classification, only considers

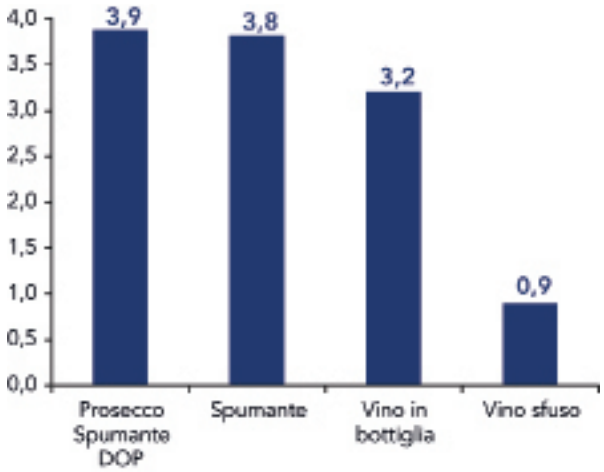
Fig. 8.3.12 – -% Export distribution of PDO Prosecco Spumante by country. Veneto - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

the products sold on the markets at a higher price (approximated by the average unit value) than their competitors. This selection is based on the methodology used by Confindustria and Prometeia in the report Esportare la dolce vita (various editions). For more information on the Beautiful, Good and

Fig. 8.3.13 – Price (euros per kg) by type of wine exported. Veneto - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

the consumer, perhaps as a result of different eating habits, is less aware of the distinctive characteristics of the products. In countries where food culture is strongly rooted and does not significantly differ from that of Italy competition from local products can represent a significant obstacle preventing the introduction of the Veneto "Good Products".
Another important factor is the trade barriers. In the world trade context, the agri-food sector is one of the most affected, especially from a non-tariff point of view. Stringent sanitary and phytosanitary regulations together with specific labelling rules that differ from one country to another can prove to be particularly burdensome without, at times, providing an effective guarantee of product quality.
The very fact that Veneto exporting businesses have seen their market share grow in an unfavourable context is the litmus test of winning internationalisation strategies.

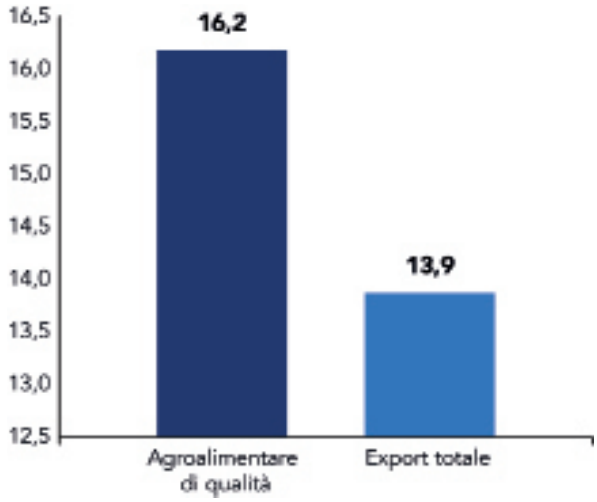
The Venetian voucher is worth 3.7 billion in the last

However, it is precisely because there is no shortage of difficulties that further efforts are needed to control the most loyal markets and to seize development opportunities in the most promising ones,

Well-made Products (BW&G), see the Regione del Veneto Statistical Report - years 2013:2015.

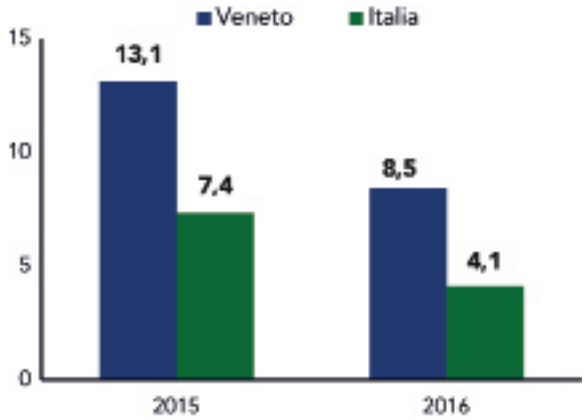
in other words, to consolidate and replicate the successes achieved. The pursuit of these objectives must not only involve the production system.
It is also necessary to implement policies aimed at supporting businesses through effective forms of protection for the quality and typicality of products against counterfeiting and the phenomenon of Italian sounding.
High quality agri-food products from Veneto and Italy on international markets
On average, in the three-year period from 2014 to 2016, Veneto exported 3.7 billion euros worth of quality food products, equal to 16% of the national total.
The fact that the sector represents one of the points of excellence of the regional production system is confirmed by its excellent performance on international markets.
Veneto's exports of quality food products actually increased by 10.8% between 2014 and 2016, with a differential that is widelypositive with respect to the growth (3.4%) of total regional exports.
Not only that: both in 2015 and 2016, Veneto's Good Products abroad saw a brighter evolution than the Italian quality agri-food in general, through the implementation of strategies that, at least in some respects, have proved to be more successful.
For the Veneto businesses engaged in a process of internationalisation, there is no shortage of obstacles: they range from those most typical to the sector (counterfeiting, evident in the phenomenon of Italian sounding, differences in the tastes and eating habits of foreign consumers, particularly high tariffs and, above all, non-tariff barriers) to those common to all medium-high end products (fierce competition from other international competitors and, depending on the destination markets, also local ones).
Nevertheless, in a global context that is certainly not accommodating, the Veneto "Good Products" have remained steady and, indeed, increased their market share, reaching 1.1% in 2016.
This is certainly not a trivial incidence if we consider the size of the regional economy, equal to about 0.2%[7]of world GDP.
had a positive effect on market share trends. As already mentioned, between 2014 and 2016, the Veneto quality agri-food industry saw its weight increase on foreign markets, while the Italian one has slightly decreased.
Veneto and its destination markets for quality agri-food products
Overall, the export distribution of Veneto quality agri-food is very similar to that of Italy. In 2016, Germany confirmed its position as the leading destination market for both Veneto and Italy. Compared to

Fig. 8.3.14 - The % incidence of Veneto on Italian exports, years 2014-2016



Source: Processing of data from Trade Map and Prometeia by the Statistics Office of Regione Veneto

Fig. 8.3.15 - Veneto's quality agri-food exports, % variations



Source: Processing of data from Trade Map and Prometeia by the Statistics Office of Regione Veneto

7 Prometeia estimates on current values in euro in 2016

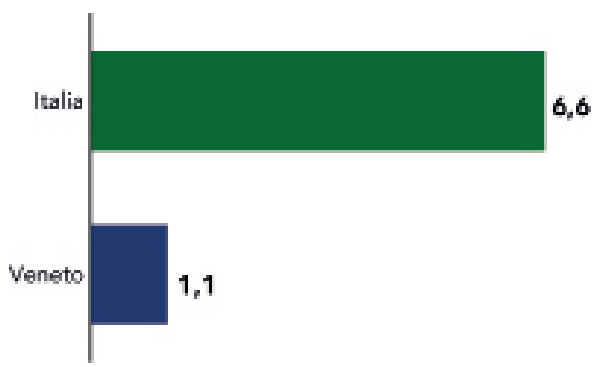
the latter, Veneto has a more significant weight than the United Kingdom and a more modest one than France. The United States ranks third for regional exports, with an incidence that is slightly lower than that shown for Italian exports. In contrast, Canada has assumed a greater weight for Veneto.
In addition to the most important outlet areas for Veneto exports, it may be interesting to ask what the region's performance has been on the markets that play a leading role on the world scene of quality agri-food products. Therefore, the main world importers were focused on, a group of 13 countries that together cover almost 60% of the world's imports of the sector.

The weight of Veneto on the demand

from the world's leading importer of quality agri-food, the United States, stood at 1% in 2016, a very respectable position if we consider the size of the market. Between 2014 and 2016, with an average annual increase in exports to the USA of 16%, Veneto has shown that it is seizing the particular liveliness of demand from the country, characterised by an increase in imports (14%), only lower than that of China. High and dynamic income, significant tourist flows that feed the HoReCa sector[8], a growing attention to food care and a greater sensitivity to healthy food than in the past: these are the factors that make the US market particularly attractive to exporters of quality agri-food. The increase in the Veneto's market share in the US shows that the Veneto "Good Products" are particularly appreciated by American consumers. Moreover, the recognition of the quality of Veneto products receives an important stimulus from tourism, considering that in 2016 the United States was the first non-European country of origin for tourist flows to Veneto. The positioning and growth of Veneto exports to the US is also surprising as it is influenced by low market accessibility. In terms of tariff barriers, there are anti-dumping and countervailing measures for some products, but there are also high non-tariff barriers due to different regulations regarding various bureaucratic aspects (e.g., product labelling) and sanitary and phytosanitary controls. In particular, the Food Sa-

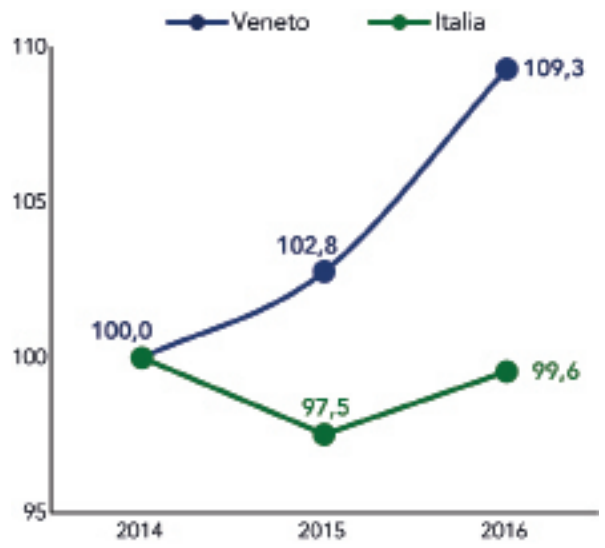
the growth of the Veneto voucher is more intense than the national one

Fig. 8.3.16 - The % market share of the world's quality agri-food - Year 2016



Source: Processing of data from Istat,Trade Map and Prometeia by the Statistics Office of Regione Veneto

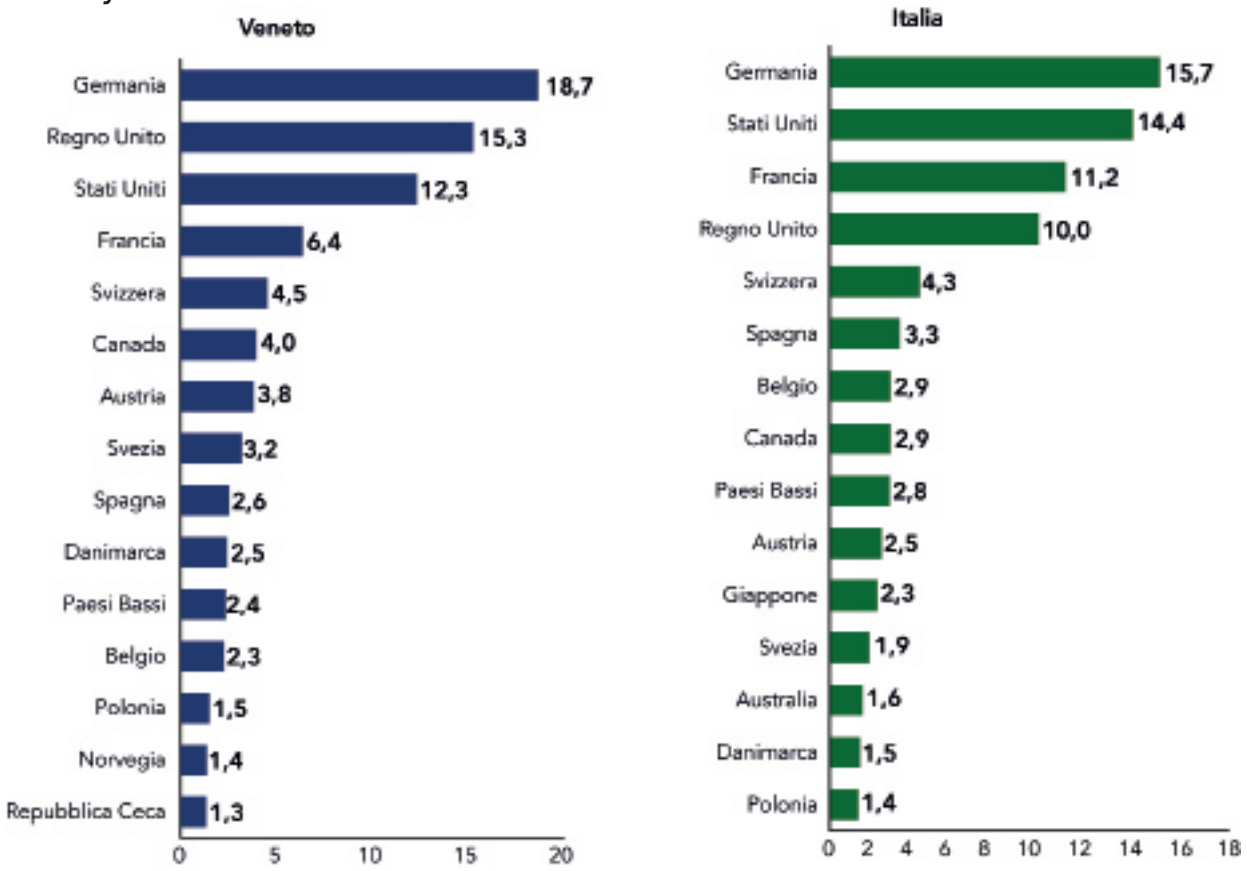
Fig. 8.3.17 - - The % market share of the world's quality agri-food sector (index no. 2014=100)



Source: Processing of data from Istat,Trade Map and Prometeia by the Statistics Office of Regione Veneto

8 Hotels, Restaurants, Catering: HoReCa identifies the entire supply chain related to accommodation and catering.

- Main target markets:% weight of the country on quality agri-food exports. Veneto and Italy - Year 2016



Source: Elaborations by the Statistics Office of the Veneto Region on Istat, Trade Map and Prometeia data

fety Modernization Act (FSMA), recently amended by the Food and Drug Administration (FDA), establishes stringent rules for the health control of domestic and foreign food products, and provides for particularly high health standards, as well as the possibility of controls and inspections in the establishments of businesses to verify regulatory compliance[9].

The first importers of good products are the USA

The weight of Veneto on the international

Demand from Germany, the second world importer of quality agri-food, reached almost 3% in 2016. The growth of the sector's exports from Veneto to Germany was more modest than that to the United States, but nevertheless more intense than that of German imports in general. As is well known, relations between Veneto and Germany are strong and well-established, which is proof that Germany is Veneto's main trading partner in this as well as in many other sectors. The link between the two areas is also strengthened by the inflow of German tourists, traditionally more numerous in Veneto than those from other European countries. High accessibility supported by the geographical proximity and above all by a common regulatory framework, contribu-

9 Cf Confindustria-Prometeia (2017) Esportare la dolce vita, Il potenziale di mercato del bello e ben fatto nei mercati avanzati, chapter 2

tes to further encourage the penetration of the Veneto "Good Products". While a particular sensitivity of the German consumer to the price of food plays against the Veneto quality products, in the opposite direction there is the growing demand for healthy products, obtained through eco-sustainable production processes.
The quality agri-foodstuffs made in Veneto and destined for the United Kingdom
accounts for 2.6% of the market and has shown an average annual growth rate for 2015-2016 of close to 20%, well above that of the country's imports. A number of factors contribute to such a brilliant performance, including the availability of British consumers' spending and a greater concentration of demand in the premium segment. In addition, there is a widespread promotion of Italian cuisine in the media and the presence, especially in the capital, of restaurants dedicated to the Italian culinary tradition often focussing on regional specificities. Therefore, the Brexit is not expected to have any impact on Veneto exports in the sector. However, any such effects will not occur before the UK's actual exit from the European Union (March 2019).

Relations with Germany are consolidated

Veneto's share of the French market
is more modest (1.3%). France boasts a deep-rooted culinary tradition and its local producers are the main competitors for Veneto products in terms of quality. However, dealing with a demanding and aware consumer can be an important lever to bring out the characteristics of excellence of the Veneto "Good Products", and this has been confirmed by the export trend in recent years. Veneto exports to France from 2014 to 2016 increased by 24%, with a growth that on the European scene was lower only than that recorded by direct exports to Spain. As proof of the recognition of Veneto quality by French consumers, an even more significant increase than the average has affected the sparkling wine sector (28%) which, as is evident, suffers from heavy competition from domestic production.

The average annual growth towards the UK was close to 20%

The European country where Veneto's exports have achieved the most intense growth between 2014 and 2016 (around 30%) was Spain, where our region's weight on the sector's imports stood at 1.1% in 2016. Such a large increase in exports shows that Veneto has been able to take advantage of the favourable economic situation in Spain: in the three-year period under review, household consumption in real terms increased by 3% compared to the EMU average of 1.9%. Furthermore, Spain is one of the most visited countries in the world. Tourism, therefore, expands the pool of demand, offering good opportunities for growth for Veneto products within the HoReCa supply chain. A food tradition based on the Mediterranean diet and a growing interest in the quality of products both in high-spending tourism circuits and by resident consumers also contribute to favouring the Veneto "Good Products".

In France, the Veneto voucher grows by 24%

Among the non-European markets, the Veneto quality agri-food sector has the most significant weight in Canada (1.2%), but the dynamics of exports are more disappointing compared to the situation in other areas (5.5% on average per year between 2014 and 2016). It is important to underline that, when moving to markets that are more distant and less accessible than the EU market, it becomes even more crucial to focus on the quality of products for which the consumer must be willing to pay a premium price. However, this commitment on the part of exporting businesses must go hand in hand, at system level, with an effective protection of production in the fight against Italian sounding.
The increase in Veneto's exports to Japan, equal to 8.5%
between 2014 and 2016, was more intense than the country's imports, which were not particularly dynamic. The accessibility of Japan is hindered above all by non-tariff barriers, linked to particularly binding phytosanitary regulations and to labelling standards with different specifications from international ones. A series of cultural and regulatory obstacles weigh on the infiltration of Veneto products in China. Nevertheless, the regional direct exports to China grew by 12.8%, with a trend that is more modest than that of Chinese imports in the same sector, but is anyway four times higher than the Italian average. The driving force behind Veneto's quality exports to China is above all wine, which could represent a tool for bringing Chinese consumers closer to other Veneto products of excellence in the agri-food sector as well as in other sectors.

The most intense growth was recorded in Spain

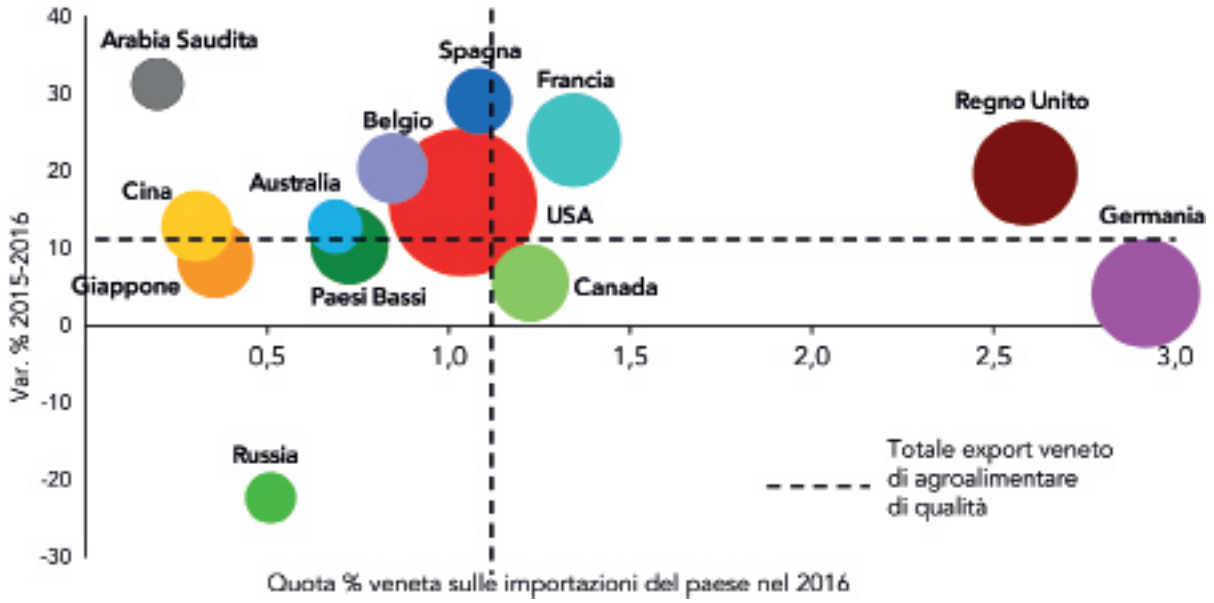
Between 2014 and 2016, there was a large drop in

exports of Veneto "Good Products" to Russia. This was a period of recession for Russia, which saw a decline not only in GDP but also in household consumption. The general context was less favourable than in previous years, and in addition there were the trade sanctions and their effects. Despite the extension of the trade sanctions, in 2017 there was a change in the trend and exports to the Russia began to increase again.
Between 2014 and 2016, regional exports of quality agri-food products to Saudi Arabia grew by 31%.
During the period under review, demand from Saudi Arabia was weak
and affected by the oil trend. The impact of the crisis contributed to directing the Saudi Arabian economy towards greater diversification with the aim of reducing dependence on the energy sector. Saudi Arabia has great potential for the development of Veneto products.

Accessibility to Japan is held back by non-tariff barriers

On the one hand, its agri-food sector relies on imports as domestic production fails to meet demand; on the other hand, given the high level of income, an important part of this demand looks favourably on high-quality food products.
In addition, Saudi Arabian market accessibility is positively affected by the generally low trade barriers. of our country and which goes beyond the usual classification of the five tourist areas (sea, mountains, lake, cities of art and spas). This is where systems flourish that are offered to the market under the same flag are flourishing while also enhancing the peculiarities of each component: congress tourism, the Veneto villas, the Pedemontana area, the wine routes and the Po River Delta, just to provide some examples. wine routes and the Po delta to provide some examples.
These include the hilly area of Valdobbiadene and Conegliano which, with its villages, abbeys and castles rising amidst a mosaic created over the centuries by the almost entirely manual work of man, is also distinguished by the production of Prosecco, a white wine that stands out for the finesse and freshness of its aromas and that has won over consumers from all over the world. The tourist appeal of this area has shown has grown strongly, especially in recent years, with an
increase of +9.1% in arrivals and +16% in presences in the last year, with over 176 thousand tourists in 2017, for a total of more than 415 thousand pre-

Fig.8.3.19 - Veneto "Good Products" in the main markets: Veneto's % share of the country's imports in 2016 and average annual % variation 2015:2016 (*)



(*) The size of the bubbles is proportional to the country's weight on world imports of quality agri-food. Source: Processing of data from Istat,Trade Map and Prometeia by the Statistics Office of Regione Veneto

Quality in Saudi Arabia is not affected by the weakness in demand

sences. Tourists mainly come from Italy (58.6%), but also from Germany (7.6%) and Austria (6.5%) and prefer hotels (71%). Guests tend to stay in the area for an average of 2.4 nights and during their stay they have the opportunity to buy Prosecco directly from the wineries, which generally also offer visits to production plants (86% of cases), the vineyard (about 63%), and tasting of the wines produced (78%).

8.4 Regions known for their wine and food offer

Veneto offers a complete panorama, to be admired, experienced and tasted, which represents the wealth and strength foreign trade is well known. Promoters of the Made in Italy product, who are particularly privileged and stimulated, will be those who have been able to taste our food and wine on site and have made purchases that, once at home, will testify to the quality and originality of our products. It is therefore interesting to compare the export markets of Prosecco Superiore DOCG with the countries of origin of foreign tourists visiting the area. In a context that from 2003 to 2016 saw the volume of exports grow by almost four times and the number of foreign tourists double, three types of markets can be identified: traditional importers, in which the Prosecco DOCG has older roots; strategic importers, who have increased imports of sparkling wine in an accelerated manner; new importers that include some small markets but have contributed to the growth of exports in the sector.

Fig.8.3.20 - Quality agri-foodstuffs: growth differentials between Veneto's exports and the country's imports - Years 2015:2016

Source: Processing of data from Istat,Trade Map and Prometeia by the Statistics Office of Regione Veneto

Looking at the graph with the market shares, it is clear that Germany stands in first place: in 2016 it was the destination of 20.7% of exports for Prosecco Superiore DOCG. The correlation between this first position and that held in terms of foreign tourism is also evident: Germany is the origin of 17.3% of the foreign tourist arrivals for stays in the hilly area of Valdobbiadene and Conegliano. Among the strategic markets, the United Kingdom and the Benelux countries - the Netherlands, Belgium and Luxembourg - stand out, and among the new markets the most relevant are Australia and Scandinavia. Exports to China over the years have shown a fluctuating trend. 2016 was in line with 2010, but given the strong growth of Chinese tourists to these destinations, the numbers of those who can appreciate our Prosecco could quickly increase.

Tourism in the Conegliano Valdobbiadene area saw a strong growth in interest in 2017 from almost all major nationalities of origin, but with a sharp downturn in the case of China.

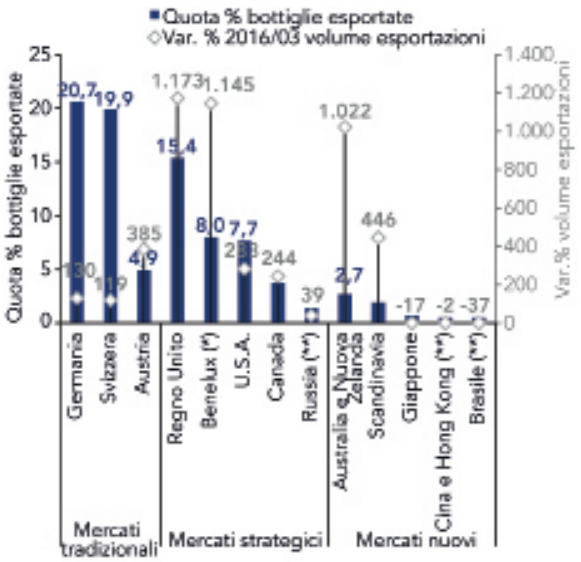
The strong marriage between tourism

There is another area of Veneto were a special wine is produced, the Soave, which is developing a niche tourism: after the 2016 boom with double-digit variations, 2017 saw a further increase of 6.1% in arrivals (reaching 136 thousand) and +10.1% presences (now around 300 thousand). Tourists mainly come from Italy (54.2%), followed by China (7.3%) and Germany (6.6%). The average stay of tourists in this area is about 2 nights and almost exclusively in hotels (81.6%).

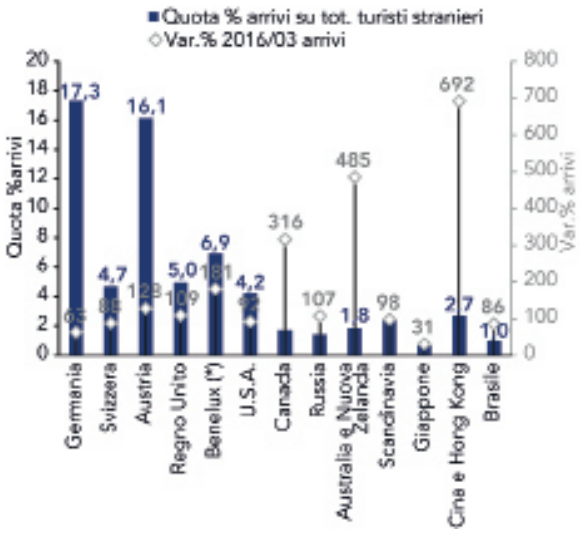
Another fine wine produced in the province of Verona is Valpolicella, a red wine with Controlled Designation of Origin, whose production has increased sharply (+36.1% in 2016 compared to the previous year), as well as its value has (+82.3%). This area also attracts mainly Italians (53.7%), followed by Germans (9.5%). The length of stay is close to three nights, with a prevalent use of hotels (69.8%). Tourist flows have been increasing since 2014, with

Fig. 8.4.1 - The appeal of Prosecco Superiore DOCG and of the Conegliano Valdobbiadene region in the main markets. 2016 % share and 2016/03 % variations of exports and tourist arrivals

Exports of Prosecco Superiore DOCG (°)



Tourists in the Conegliano Valdobbiadene area



(°) 2016 latest data available
(*) The Netherlands, Belgium and Luxembourg (**) 2016/10 % variation
Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto and Conegliano Valdobbiadene Study Centre

+8,4% of arrivals in the last year (112 thousand arrivals) and +6,3% of presences (294 thousands).
The typicality experienced in agritourism When it comes to food and wine you cannot help but mention the agritourism offer that, in addition to contact with nature and the distance from the chaos of large urban centres, seduces guests with a unique offer that reflects Veneto, its history, its traditions and the civilization of the local community: in the holiday farms, as well as spending the night in a welcoming environment, you can taste typical products that reflect the local gastronomic traditions. The agritourism offer in Veneto, with 1,484 businesses in 2016, represents 6.5% of the national offer, a share that is only surpassed by two regions where this type of tourism offer is historically very well-established, Tuscany (19.9%) and Trentino Alto Adige (15.8%), in addition to Lombardy (7.1%).
In Veneto, 62.8% of agritourism establishments offer accommodation, while 49.5% offer catering. In 43% of agritourism farms, in addition to other services or as an alternative to them, the offer includes

Tab. 8.4.1 - Tourist movements in the Conegliano Valdobbiadene region by origin. Year 2017

	Arrivi			
Provenienza	2017	Quota %	Var% 2017/16	Presenze 2017
Italia	103.586	58,6	9,2	227.990
Germania	13.451	7,6	15,4	33.253
Austria	11.471	6,5	5,7	25.902
Francia	3.767	2,1	8,9	8.822
Regno Unito	3.544	2,0	5,8	9.300
U.s.a.	3.487	2,0	22,3	9.934
Svizzera-Liecht.	3.383	1,9	7,0	8.467
Polonia	3.274	1,9	45,0	5.668
Paesi Bassi	3.062	1,7	0,4	11.092
Belgio	1.550	0,9	3,7	4.445
Cina	1.492	0,8	-18,4	4.298
Romania	1.491	0,8	3,6	6.223
Spagna	1.344	0,8	9,8	2.904
Australia	1.311	0,7	16,9	3.883
Russia	1.222	0,7	26,1	3.130
…				
Totale generale	**176.856**	**100**	**9,1**	**415.663**

Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

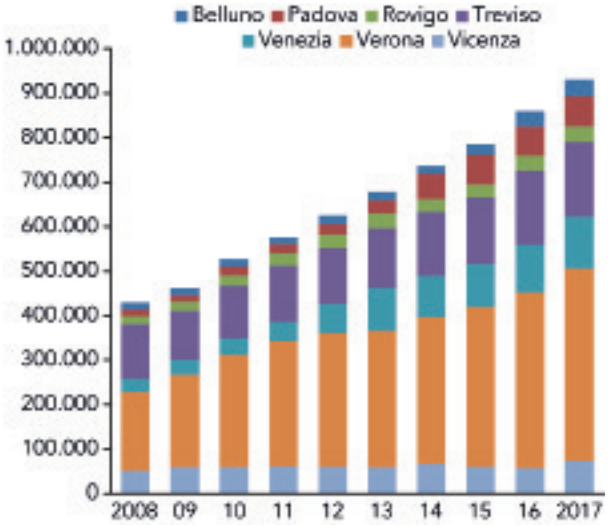
tastings of agricultural and zootechnical products that can be used directly, such as milk or fruit, and/or products that require initial processing, such as oil, wine and cheese.
Each agritourism establishment may have more than one licence
Therefore in Veneto in particular, they offer different combinations of the services. In about half of the Veneto agritourism establishments the offer is specialised: 32.3% only offers accommodation, 11.3% only catering and 8.6% only tasting. Many have a mixed offer, 12.7% even provide a complete accommodation/restaurant/tasting service.
In Veneto, the province of Verona is characterised by largest number of agritourism establishments (27.4%) and, as regards the three possible type of licences, most of them offer accommodation; the record for the number of establishments offering catering services goes to Vicenza and its area, for a total of about 9,000 seats out of a total of over 43,000 seats offered in the entire region. The Treviso area has the highest number of agritourism establishments licensed for tasting.
The purchase of agricultural and/or food products produced by the agritourism business, which is possible in 27.6% of establishments, also contributes to whetting the guests' appetite and spreading our quality products: this activity is widespread above all in the provinces of Belluno and Vicenza, where it involves 44.2% and 43.5% of the businesses respectively.
In the context of tourist accommodation in Veneto, where the role played by traditional structures remains fundamental, in recent years there has been an increase in the number of customers who choose agritourism establishments for their holidays. There is still a niche tourism which was chosen only by 1.6% of tourists staying in Veneto in 2017, but the preference towards the agritourism offer are growing at a very fast pace. Agritourism establishments in Veneto are registering very high average annual growth rates, double those achieved at the national level: in Veneto from 2008 to 2017 arrivals increased on average by +10% per year and presences by 9%. In the last year, the increases were of the same magnitude: +8.1% for arrivals (over 300 thousand) and +8.3% for presences (about 930 thousand).
Almost half of the tourists who choose to stay in an agritourism establishment have the province of Verona as their destination, followed by the province of Treviso (21.6% of arrivals).
Compared to the other Italian regions, the but characterised by shorter stays on average (3 nights).
Guests are still mostly Italian (53.3% of arrivals in 2017), but presences recorded by the Veneto agritourism establishments over the years show increasing exposure to foreign markets, so much so that in 2013 there was a surge and now 52.9% of overnight stays are by international guests. The national presences are still growing, but at a slower rate than the foreign ones: Italian presences in 10 years have increased by 74.8%, foreign ones have almost tripled (+175.3%).
The flow of tourists who choose Veneto agritourism to spend their holidays is characterised by seasonality, especially when it comes to Veneto agritourism offer appears in fifth position in terms of number of bed places (over 13 thousand) and presences, climbing to third place in terms of arrivals. The importance of this type of hospitality is therefore evident, incoming tourism, with an increasingly pronounced appeal over Easter.
Germany appears at the top of the list of foreign markets that choose this type of structure, with a clear distance from other countries. This sector has recorded strong increases in the number of guests Russia and Asia, just like Veneto tourism in general.
Among the Veneto provinces, Verona stands out, as it welcome% of tourists choosing agritourism holidays; in the agritourism establishments in the province of Padua the length of stay is higher (3.7 nights), while those in the province of Venice show a more international clientèle (56.1%).

8.5 The economic impact of the agri-food system

Nowadays we are all chefs: a variety of media outlets, such as TV, social channels, radio and newspapers, suggest recipes, ingredients and ways of cooking, experimenting, frying and sautéing all the time.
There is often a lack of consideration towards the origin of food, the social value of what is cooked, who cares for and grows products, the ecological impact of what is imported from the other side of the world.
On the other hand, there is a growing interest in food as a cultural product, as an element of identity and

In agritourisms + 8.1% arrivals and + 8.3% attendance in 2017

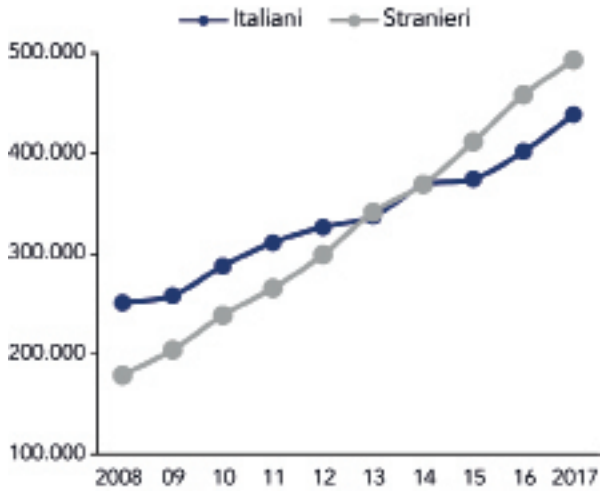
Fig. 8.4.2 - Presence of tourists in agritourism establishments by province. Veneto - Years 2008:2017



Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

pride, as well as a driver of possible economic evolution, and not just as a commodity.
The Food sector, in fact, is one of the specialities of Veneto, one of the pillars of our economy. But what is the agri-food chain? What is its impact on the economy? Which sectors and players does it involve? What are its trends? Is Veneto competitive in this sector?
The following paragraph will try to answer these questions by analysing the data available from official statistics.

Fig. 8.4.3 - Presence of tourists in agritourism establishments by origin. Veneto - Years 2008:2017

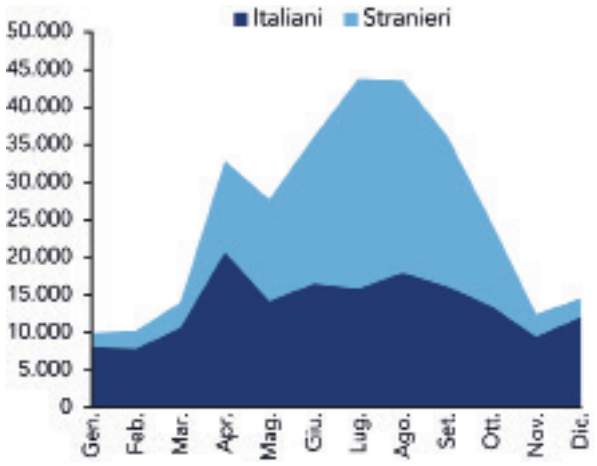


Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

The wealth produced by the food supply chain

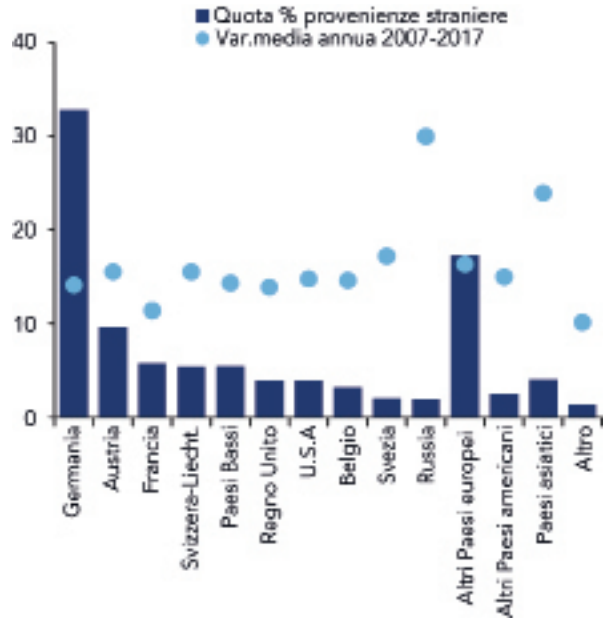
The food supply chain involves various economic activities, not purely agricultural ones, and the definition on which this study is based comes from the literature, by the French agronomist Malassis (1973): the food supply chain is "the route taken by a product within a production system", understood as "all the agents and operations that contribute to the formation and transfer of a product until its final use". With respect to the definition by Malassis, the actors who carry out the production, distribution and administration operations that contribute to the production and transfer of the product up to the final stage of use will therefore be defined.
The food chain is particularly complex and intersected and involves all three sectors of economic activity: agriculture, with the production of raw ma-

Fig. 8.4.4 - Tourist arrivals in agritourism establishments by month and origin. Veneto - Year 2017



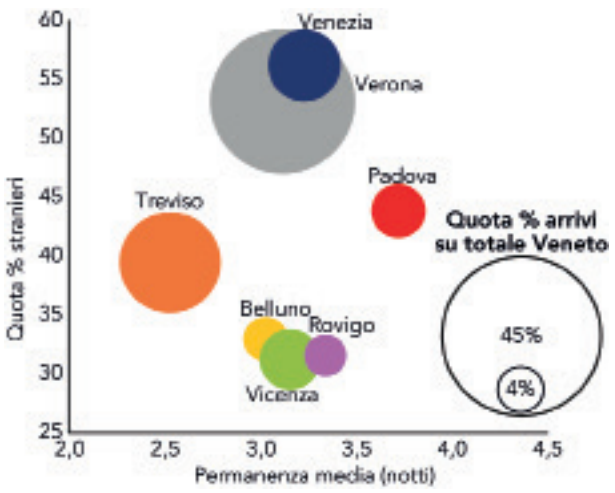
Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Fig. 8.4.5 - 2007- 2017 average annual variation and % share of foreign tourists staying in agritourism establishments by origin - Year



Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

Fig. 8.4.6 - Tourist arrivals in agritourism establishments by province. Veneto - Year 2017



Source: Processing of provisional data from ISTAT - Regione Veneto by the Statistics Office of Regione Veneto

terials; industry, through their processing and the supply of machinery; the tertiary sector, mainly with distribution and marketing, as well as catering.
These sectors are directly or indirectly related through a plurality of economic agents that allow the agricultural product to reach, after several phases, the final consumer. The phases and relations are supported by external players who ensure the correct functioning of the supply chain: the production of feed, fertilizers, additives; the manufacture of agricultural machinery; the supply of water and electricity and the various services, including transport, logistics, supplies, service activities such as administration, communication and advertising of products, consultancy, analysis, etc.
The agricultural product can reach the consumer directly through farm shops or farmers markets or agritourism establishments, or through organised distribution and/or catering, or be delivered to processing businesses which in turn will deliver the product to the consumer through distribution and/or catering. In some cases, industrial transformation is characterised by different stages: the transformation of the agricultural product into semi-finished products and then into finished products.
Complementarity aspects with other sectors should not be overlooked.
An important point of contact is, for example, that of the tourism industry, which can contribute to the decisive enhancement of the catering sector, activating development potential that has not yet been fully exploited, and that of the protection of the region, which obviously immediately involves the way in which the activities of the agricultural sector are organised. In turn, tourism is a vehicle for export: the visit of foreign citizens to Italy and Veneto is a first channel of contact between foreign demand and domestic supply, as the good food tasted during holidays leads to a demand for the same products once back home.
In this Report, the main players in the supply chain, who can be measured with greater accuracy, will be observed, namely those linked to agricultural production (agriculture, forestry and fishing), processing in manufacturing (food, wine and other beverages and tobacco industries), marketing and distribution (wholesale and retail trade of food and beverages) and the catering channel.

It is estimated[10] that in 2015, the latest year for which official statistics data is available, the supply chain generated a value added of over 14.5 billion euros, equal to about 9.5% of total wealth produced in Veneto, and up 6.4%[11] compared to the figure recorded in the previous year.
In the historical data series observed[12], calculated at constant prices with base 2010 to offset the effect of inflation, it can be seen that the value added share of the supply chain in the GDP is always higher for Veneto, by at least one percentage point, compared to the national one.
The wealth trend produced by the supply chain has been fluctuating over the years and is similar at national and regional level, even if the fluctuations in Veneto are more subdued when negative. In the period considered, there were two negative years (2009 and 2012), in which food consumption dropped, then years of growth, two years of stability (2013 and 2014) and finally the success of 2015, probably linked to the positive impact of Expo 2015 "Feeding the planet, energy for life". The weight of the agricultural sector's value added is 19.8%, paradoxically less than one fifth of the supply chain, but explained by the excessive division of production and the limited productivity of the sector.
The share of value added generated by the industrial component is 21.6% and can be divided into 15.9% produced by the food industry and 5.6% by the beverage industry.

The commercial intermediation component

produces the most substantial part of the value added for the agri-food chain, 35.3%, more than a third of the total, which can be divided into 9.9% for wholesale trade and 25.4% for retail trade.

The wealth produced by the food chain is high

The incidence of catering is also important, equal to 23,3% of the wealth produced by the agri-food chain. Among the various components of the supply chain, let's now focus on the food industry, which shows a strong expansion from 2008 to 2015 (+25.7%) and above all continues to increase its economic impact. In fact, while its weight with respect to the entire Veneto economy increased from 1.7% to 2.2%, the share of wealth produced with respect to the entire Veneto manufacturing industry increased by well over 2.5 points, from 7.7% in 2008 to 10.3% in 2015.

Fig. 8.5.1 – Value added of the agri-food chain (*): % share of the total economy. Veneto and Italy - Years 2008:2015

(*) Chain-linked figures with reference year 2010
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

An in-depth study on the restricted agri-food sector in Veneto

A concise picture of the Veneto agro-food chain is now provided, based on the information available from the official statistics[13] on the number of bu-

10 The estimation methodology is available from the Statistics Office of the Regione Veneto. The ATECO (economic activity classification) sectors taken into consideration are the following: all of the code A-Agriculture, forestry and fishing; all of the code CA-Food, beverage and tobacco industries; for trade the codes: 4617, 4631, 4632, 4633, 4634, 4635, 4636, 4637, 4638, 4639, 4711, 4721, 4722, 4723, 4724, 4725, 4726, 4729, 4781; the code 56- catering services activity

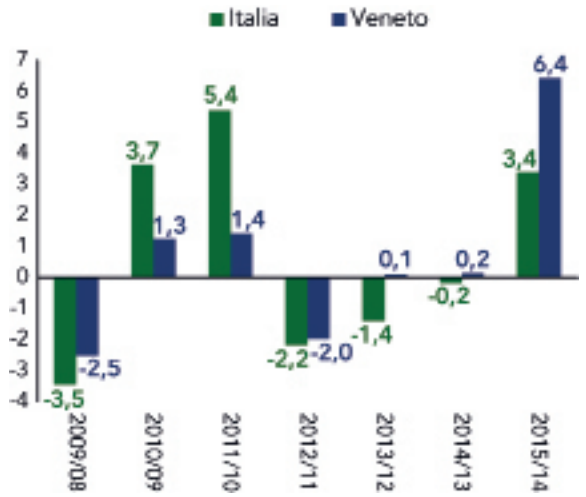
11 Variation calculated on values at 2010 prices

12 Limited to the official data available. All historical series are valued at 2010 prices, to offset the effect of inflation.

13 Archivi Istat Asia e Frame-SBS.

sinesses, their workers and their economic results. Agricultural production, processing activities, commercial distribution and catering activities are the four main segments of the agri-food chain. The decision to use the most up-to-date ISTAT archives

Fig. 8.5.2 – Added value of the agri-food chain: annual% variations. Veneto and Italy - Years 2008: 2015



Fonte: Elaborazione dell'Ufficio di statistica della Regione del Veneto su dati Istat

has led to the exclusion of businesses belonging to the primary sector, but has made it possible to focus and deepen the study of the last three supply chain segments. For convenience, we will call all of these three sectors "restricted agri-food".

Despite the international crisis and the slowdown in domestic consumption

and the consequent reduction in the number of businesses in the sector, the restricted food supply chain is performing stronger than the regional economy as a whole and its economic performance is growing significantly: in the three-year period of 2013-2015, the turnover of Veneto businesses in the sector grew by an average of +2.5%, a higher performance than the pace of regional GDP. The excellent state of health of the Veneto agri-food sector is also confirmed by the results of the value added generated by the supply chain, which grows at higher rates both with respect to turnover (+6.1% per year in the three years in consideration) and regional GDP. The Food & Beverage industry segment has been the driving force behind the excellent economic performance of the restricted food supply chain: a historical propensity for internationalisation and the entry into new foreign markets, both European and non-European, has generated a significant

The wealth produced by commercial activities is prevalent

Fig. 8.5.3 – % distribution of the value added of the agri-food chain by the main players. Veneto - Year 2015

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

increase in the foreign turnover for businesses in the sector, which has more than offset the drop in domestic consumption.

The incidence of foreign component on total turnover has increased in recent years (from 16% in 2013 to 18% in 2015), thanks to the quality and typicality of many Veneto high value added productions.

This effect is less visible at the national level, where the value added performance of the three supply chain segments is very close to the average values of the period under review.

The production base of the Veneto food industry is important in the national context

In Veneto, the Businesses operating in the restricted agri-food in 2015 were more than 44 thousands and accounted for 7.7% of the national total; most of them were in the catering and food trade sectors (4% and 3.1% respectively).

IIn terms of workers, the weight of the Veneto bu-

sinesses was even greater and equal, in 2015, to 10.3% of the total number of workers in the Italian restricted agri-food sector. Over 4% of the workers was employed in food distribution and about the same number in the catering sector; the share of the food industry sector increased (1.9%), supported by a high average business size.

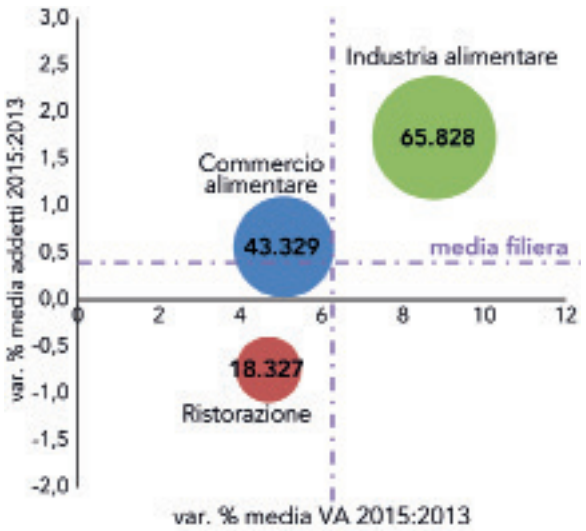
Quality exports push the performance of the Veneto food industry

In fact, in the food industry and in agri-food trade, while this share in catering is just over 12% of the workers. In catering, the average enterprise size is very small: businesses with up to 3 workers employ 26.8% of the total workforce and those between 4 and 10 workers employ a further 38.5% of it.

The dynamics of the number of businesses and people working in the restricted agri-food sector have been very volatile over the years, just as we have seen in the previous paragraph for the wealth produced by the entire food chain: after the first difficulties in 2009, the number of businesses, in line with the national trend, started to rise again for a couple of years up to +1.6% for Veneto in 2011. In the following years, Veneto seems to anticipate the national dynamics, with a stalemate in 2012 and a slight contraction in the number of businesses in 2013, until the second major contraction in 2014, which saw a reduction in the production base of the restricted agri-food sector both in Veneto (-1%) and at the national level (-1.4%).

The dynamics of the people working in the supply chain during 2009-2014 is similar, but with higher peaks for Veneto, compared to the national trend, which remains more contained both in terms of growth and contraction.

Fig. 8.5.4 – Performance of the sectors in the restricted agri-food chain. Productivity value year 2015 (euros), average annual % variation 2015:2013 of value added and workers. Veneto



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.5.5 – Performance of the restricted agri-food chain sectors. Productivity value year 2015 (euros), average annual % variation 2015:2013 of value added and workers. Italy

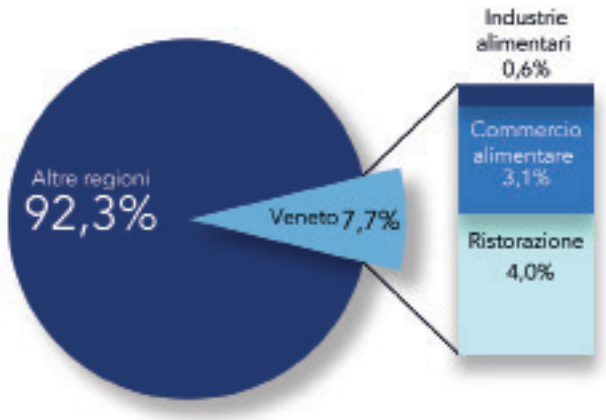
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

The productive base of the Veneto agrifood industry is important in the national text

As already mentioned, 2015 was a turning point, more than half of the people employed work in businesses with more than 50 employees,together with the Expo Milano "Feeding the planet, the energy of life", which focused the global spotlight on Italy: agri-food businesses stabilised (-0,5%

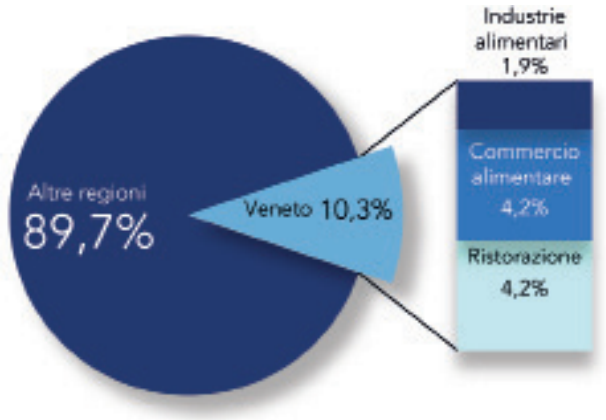
for Veneto and -0,3% for Italy) and there is a strong increase in the number of people working in the sector (+4.1% in Veneto and +1% at national level). The turnover of Veneto's restricted agri-food sector amounted to over 56 billion euros, accounting for 13.3% of total Italian turnover in the sector: the obvious importance of the Veneto's economy in the national economy in terms of turnover is clearly explained by the strong vocation for exports of Veneto, which therefore attracts a significant turnover. In line with the above, the agri-food turnover in Veneto had also suffered a setback in 2014 (-2.4%), and then showed impressive growth in 2015 (+7.4%).

Fig. 8.5.6 – % distribution of restricted agri-food businesses. Year 2015



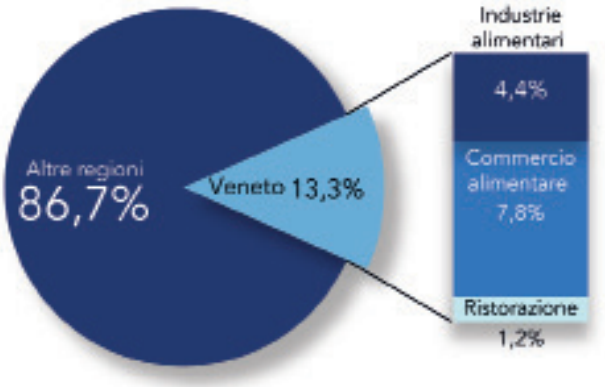
Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.5.7 – % distribution of workers in the restricted agri-food sector. Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.5.8 – % distribution of restricted agri-food sector turnover. Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

The food industry

Despite the fall in domestic consumption, the food industry sector has fared better than others in these difficult years: between 2013 and 2015 the negative balance of the number of businesses and workers that had characterised the previous year came to a halt and, indeed, in 2015 there was a recovery in the sector's workers (+2.5% on an annual basis), while there was substantial growth in value added, higher than that of revenues, which indicates the start of processes to improve efficiency. In 2015, there were 3,204 businesses in the food industry sector, with over 39,000 workers and a turnover of just under 15 billion euros. The value added generated by agri-food businesses amounts to 2.3 billion euros and in the three years grew at an average annual rate of more than eight percentage points.
Approximately 64.7% of businesses in the food sector operate in the preparation of bakery and flour products and represent more than 43% of the total employment in the sector. The value added generated by these productions is 35% of the entire wealth produced by the food industry.

2015, a great year interest

11.6% of the businesses in the sector are involved in the production of other food products and 9.3% in the processing and preservation of meat. Dairy and

cheese-making businesses account for just under 6% of the food processing sector.

Large volume of business for the Veneto agri-food industry

The distribution of workers is more heterogeneous: the meat industry employs more than a quarter of them (25.9%); 9.3% is in other food products, 8.1% in the dairy and cheese industry and almost 5% in the processing and preserving of fruit and vegetables.
As for the food industry value added, about 40% of it comes from the processing and preservation of meat and other food products, while the share generated by the dairy and cheese industry is around ten percentage points, equal to an amount of 264 million euros.
The wine and other beverage production industry
The trend for businesses belonging to the wine and beverage production sector between 2013 and 2015 remained virtually stable, with 339 businesses in 2015, while the trend of employment (5,692 workers in 2015) was significantly positive, in contrast to the years 2009 and 2011, with an average annual increase of four percentage points. As regards the wealth produced, the beverage sector is the best performer in terms of value added: +10,8% per year on average over the last three years, for a total of 667 million euros in 2015.
The distribution of the individual sectors reveals the Veneto tradition of the production of wines such as Prosecco, Valpolicella, Soave, but also the distillation of grappa and the exploitation of mineral water sources. The wine production sector accounts for about 2/3 of the businesses, workers and wealth generated by the beverage industry.
In terms of the average enterprise size, there are two groups: many micro- and small-sized businesses, mainly in the brewing, distilling and wine sectors, and a few medium- to large-sized businesses in the water and soft drinks industry (137 workers per business).
Wholesale trade of food products In 2015, there were 6,117 wholesale businesses in the Veneto agri-food chain, i.e., 59 less than in 2013, divided between intermediaries (3,666, or 59.9%) and food products wholesalers (2.451, equal to 41,1%). Wholesalers are mainly in the fruit , vegetables and beverage sectors.
The workers in the food wholesale trade exceed 21 thousand units and about 60% are attributable to intermediaries, wholesalers of fruit and vegetables and wholesalers of other food products, each with

Fig. 8.5.9 – -% share of businesses, workers and value added in the food industry by sector. Veneto - Year 2015

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

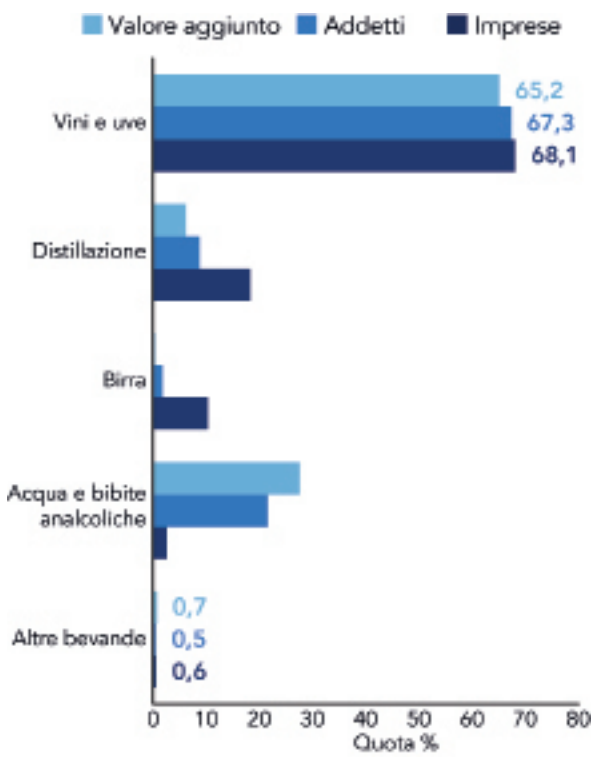
a share close to 20%. Businesses are very small in size: 3.5 workers per business, which become 7 by excluding intermediaries.
The value added generated by this sector once again broke through the threshold of four billion euros, recording, however, the lowest average annual growth among all sectors of the food supply chain (+1.9% per year between 2013 and 2015), and is also the only sector to record a reduction in turnover in the period under review.
The trend of recent years shows that the downturn in food retail businesses is slowing after the fall in consumption that occurred during the economic crisis of 2008. The situation appears slightly different when looking at the employment trend: in recent years there has been a growth in employment, driven by large retailers, which returned to pre-crisis levels in 2015 (almost 81,000 employees in 2015). The recovery is also confirmed in terms of wealth produced: in 2015 the value added generated by businesses in the sector was 3.2 billion euros, with an average annual growth rate in line with that recorded for the entire supply chain (+6.4% between 2013 and 2015).
In 2015 Veneto businesses in food product retail trade were 11,490 and almost 62% of operators were in this specialist facilities, while non-specialist facilities accounted for 20%. Non-specialist retai-

ling is where most of the sector's workforce is concentrated, with around 75% in 2015, particularly in large retail businesses, as well as most of the value added generated by the sector (88% in 2015). Itinerant food retail traders are
2,062 (18%); due their small size, they employ 4,126 people, equal to only 5.1% of the workers in the sector, and generate less than 2% of the total value added of the sector.

Catering

The catering activities include three types of services: restaurants, canteens and catering activities and bars.

Fig. 8.5.10 – -% share of businesses, workers and value added in the wine and other beverages industry by sector. Veneto - Year 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

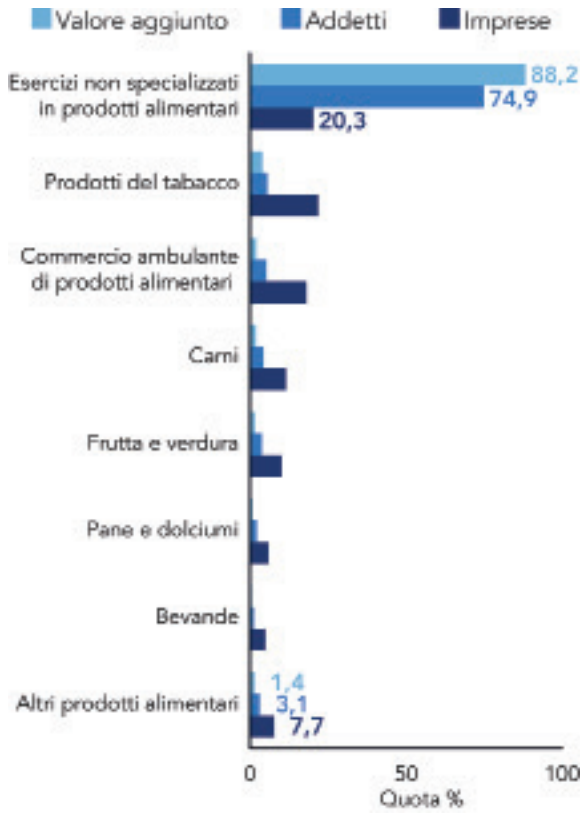
The trend of the last three years highlights a negative dynamic for both businesses and workers in the catering sector; However, the wealth produced is growing: the value added increased by +4.7% per year between 2013 and 2015.
In 2015, 55.3% of the Veneto businessesin the sector were restaurants, which employed 63.2% of the sector's workforce, 43.7% in bars and businesses without a kitchen and only 1% in canteens and catering, which, however, employed 9.4% of the catering workforce.
The distribution of businesses on the basis of value added (1.9 billion euros in 2015) sees more than 65% of the total value attributable to restaurants, while only 22.4% is generated by bars. In 2015, the value added of catering activities was close to 236 million euros. In terms of performance, the highest growth was achieved by restaurants (+7.1% per year between 2013 and 2015), while bars recorded a negative result, with an average annual rate of -1.3%).
The competitiveness of Veneto's agri-food industry: regions compared
A comparative analysis of the Italian regions requires the scope of analysis to be reduced, by reason

Fig. 8.5.11 – % Share of businesses, employees and the added value of wholesale trade in food products for each sector. Veneto - Year 2015

Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

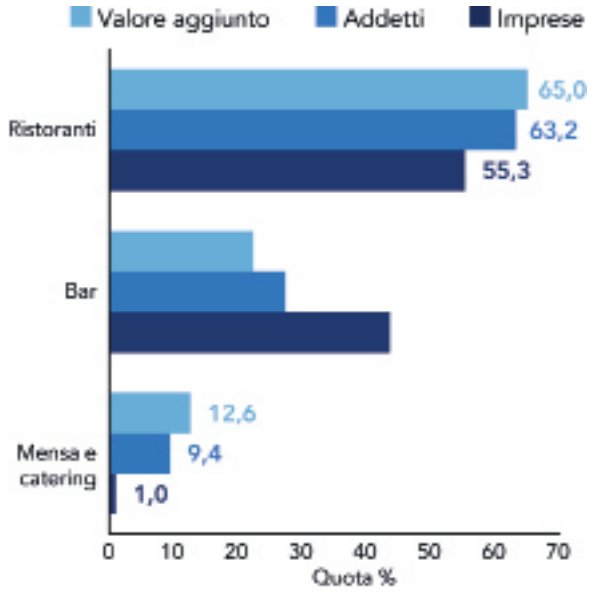
of archive information available and the data used. The following analysis will therefore focus on businesses in the food industry and catering services.
In 2015, there were over 26,000 production units in the sectors analysed in Veneto, employing over 147,000 people, of which over two-thirds in the catering sector; in absolute terms, Veneto is the third largest Italian region, after Lombardy and Emilia Romagna, in terms of the size of the agro-food employment base.
The same three regions also have a place on the podium in terms of turnover and value added: Veneto remains behind Lombardy and Emilia Romagna, with a turnover in the food and catering industry of around 24 billion euros and an value added of almost 5 billion euros in 2015.
However, the most interesting comparison is in terms of labour productivity, an indicator of entrepreneurial production capacity, which is measured as the value added produced per employee: for businesses in the food industry in Veneto, productivity was around 66,000 euros in 2015, well above the national value of 56,544 euros; in addition to the aforementioned regions of Lombardy and Emilia Romagna, the other regions with the highest labour productivity in the food industry are Valle d'Aosta, Piedmont and the Autonomous Province of Bolzano.
The productivity dynamics of the Veneto food industry is among the highest in Italy, with a strong growth and an increase of more than 20 thousand euros of value added per worker compared to the 2008 value. The other regions with the highest absolute increases in productivity are Umbria and Valle d'Aosta, although the first does not reach the levels of Veneto; the second is at the top of the regional ranking for productivity in the sector.
As already seen in the last edition of the Statistical Report, industry is the economic sector with the highest productivity, in fact, food industry productivity reaches a much higher level than the total of industry and services in Veneto (46,506 euros in 2015). Labour costs, which include the cost of wa-

Fig. 8.5.12 – % Share of businesses, employees and the added value of the retail trade of food products for each sector. Veneto - Year 2015



Source: Elaboration of the Statistics Office of the Veneto Region on Istat data

Fig. 8.5.13 – % Share of businesses, employees and the added value of catering for each sector. Veneto - Year 2015



Source: Elaboration of the Statistics Office of the Veneto Region on Istat data

ges and non-wage costs borne by the employer, are also higher in the food industry than in the total industry and services in Veneto.
The other sector analysed, catering, is not only at lower levels of productivity (18 thousand euros in Veneto in 2015), but instead of growing, in recent years it has recorded a contraction in productivity, which remains below the values reached before the economic crisis.
It should be noted that these levels and similar dynamics are mostly due to the fact that catering is a labour-intensive production sector. The use of such production processes is also conditioned by certain factors such as the availability of the workforce and its cost.
Therefore, generally these labour-intensive sectors have low labour costs: the available data in fact shows that the labour cost indicator per catering worker is significantly lower than the value of the total industry and services.
Veneto, like the whole of Northern Italy and some regions of Central Italy, shows the most balanced values, while a large part of Central-Southern Italy has very low values.
As for productivity, the indicator of investment expenditure per worker is also higher for the Veneto food industry sector (8,969 euros) compared to the total value of industry and services (4,972 euros); Veneto, together with the Autonomous Provinces of Trento and Bolzano, Friuli Venezia Giulia, Emilia Romagna, Piedmont, Umbria and Lombardy, is one of the regions with investment per worker higher than the national average.
Investments per worker in the catering sector are clearly lower, about 850 euros per worker in Veneto; the exceptional investment expenditure per workers in the Province of Trento, Lombardy and Friuli, very high compared to that of the other regions and the national average.

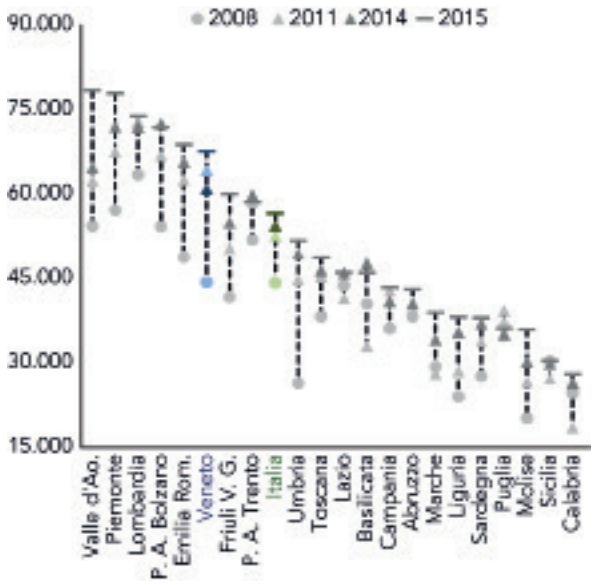
The productivity of the Veneto food industry shows one of the greatest growths

This analysis show that the food sector in Veneto is certainly flourishing and still developing, with some peculiarities linked to the tradition and specialities of the area, as well as some specialisations in production, where the organisational and management model can find incentives for improvement, investing in technology and innovation.

8.6 Employment from agriculture to catering

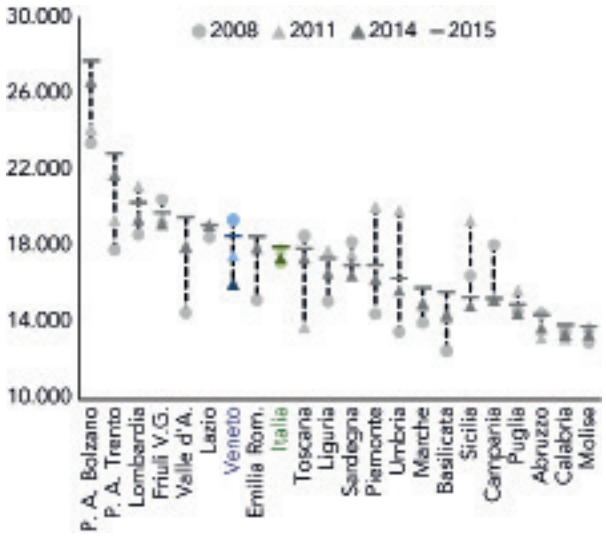
In Veneto, the agri-food sector employed about 309,000 people in 2017, representing 14.5% of all the workforce of Veneto. This data can be broken down to analyse the agri-food chain in detail, distinguishing three different phases and actors. The first phase is production: the players are workers in agriculture, forestry and fishing; in Veneto they are over 68,000, amounting to 3.2% of the Veneto total and 22% of the agri-food sector total. The second phase is processing: from agriculture, we move on to the food, beverage and tobacco industries. There are 47,000 workers in this second phase in Veneto, equal to 15.2% of the agri-food total and 2.2% in the total workforce. Finally, the processed products are put on the market: the distribution phase involves the workers of the wholesale and retail trade for food products and the entire catering sector. This part of the supply chain absorbs more than 193,000 workers, i.e., 62.6% of all the agri-food workers and 9.1% of the total workforce.
Over time, the agri-food sector has only partially followed the trend observed for the total number of employees: since 2011, the trend has alternated between phases of growth and contraction, recording a significant increase in 2017 (+6.5%). Even the individual components of the supply chain did not follow the same temporal trend: since 2011, only those employed in distribution (trade and catering) have grown, although alternating positive years with less favourable ones, reaching a new record in 2017 (+12% compared to 2016 and +17% compared to 2011). The production phase, i.e., the agricultural sector, lost more than 11,000 jobs between 2012 and 2015 and only recovered in 2016. Over the past year, it has remained at the 2011 level. The number of people employed in the food industry in 2017 also equalled that of 2011, but in the intermediate years it recorded a sharp decline followed by a rapid recovery (-12% from 2011 to 2013, +28% from 2013
to 2015).
As previously mentioned, in Veneto, 63% of those working in the agri-food sector are employed in catering and trade (61% in Italy), 22% in production (25% in Italy) and the remainder in processing. In comparison with other Italian regions, Veneto is in a middle position, while other regions are characterised by some extreme values; Lombardy and Liguria, for

Fig. 8.5.14 – Value added per food industry worker by region (euros) - Years 2008, 2011, 2014 and 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.5.15 – Value added per restaurant worker by region (euros) - Years 2008, 2011, 2014 and 2015



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

and Calabria the production part of the chain weighs 41-49% and the distribution phase stops at 42-44%.

Region where you go, specialities that you find Regional specificities also emerge by observing the agricultural sector alone. From the food point of view, example, are mainly specialist in distribution, with a percentage of workers exceeding 72%, while the share of workers employed in agriculture does not exceed 12%. In contrast, in Basilicata Italy is rich in typical products and regional specialities and this has an impact on the structure of the labour market.

Grape cultivation is the first area of agricultural employment in Veneto, Piedmont, Friuli Venezia Giulia, Tuscany and Abruzzo. In Veneto, this specialisation is particularly evident, given that 37% of those working in agriculture are employed in the cultivation of grapes, a value that drops to 30% in Tuscany and 22% in Piedmont. Trentino Alto Adige and Emilia Romagna are characterised by a high number of people employed in the cultivation of pome fruits and other stone fruits (apples, pears, peaches, etc.), while Valle d'Aosta and Sardinia are used for breeding (firstly cattle, secondly sheep). Floriculture is the strongest employment sector in Liguria, while in Calabria the cultivation of olives is widespread. Cereals mainly provide employment in the central regions (Marche and Umbria) and vegetable crops in the South. Finally, Lombardy, Molise and Basilicata are characterised by a significant presence of mixed farms, based on the cultivation and breeding of animals without specialist production.

As regards sectors of the supply chain and around three years older than the total number of workers. It should be noted that in recent years

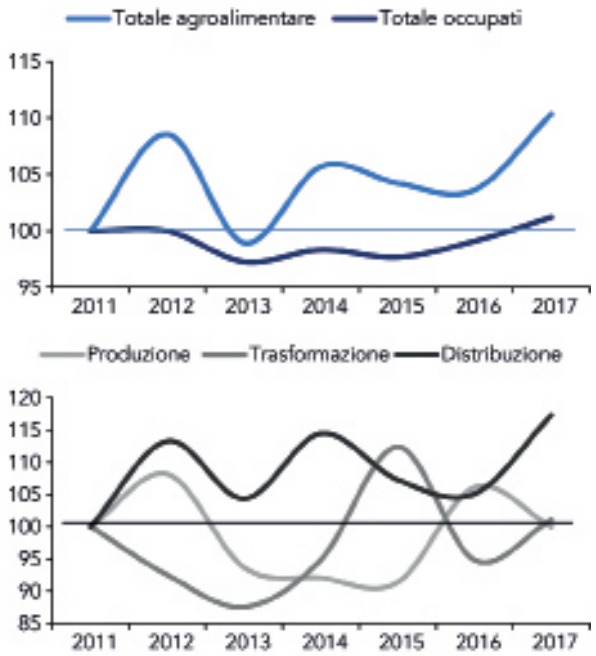
Higher qualificationS in agriculture

As far as the characteristics of working people have changed: the share of under-35s and socio-demographic characteristics of those employed in the agri-food sector are concerned, it is clear that the three phases of the supply chain are rather diverse.

In the first step of the chain, i.e., agriculture, has increased from 20% in 2011 to 24% in 2017 and the share of workers with at least an upper secondary school diploma has increased by 16 percentage points (from 39% to 55%). The future of agriculture in Veneto is in young workers with higher qualifications: they are the ones who will bring innovation and quality to products.High proportion of students studying agricultural subjects in Veneto

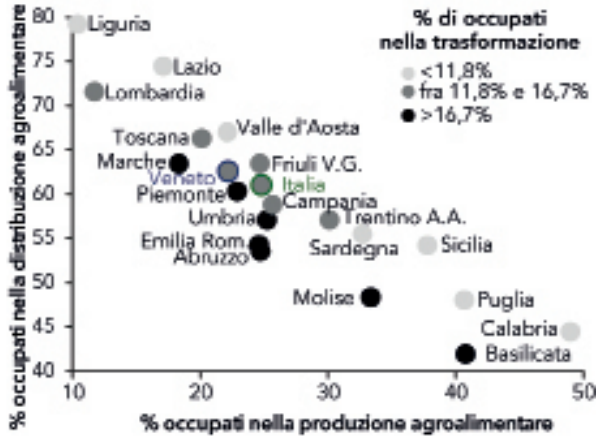
In this regard,approximately 6,000 students enrolled in agricultural upper secondary schools in Veneto in the 2016/2017 school year, i.e., 3% of all Veneto students. In particular, over 3,200 students attend professional training programmes in "services for agriculture and rural development" and in "development and marketing of agricultural products and the local territory", while just under 2,000 attend a technical school and follow the "agriculture, food and agro-industry" programme. In addition, just under 700 students are following more specialised technical programmes in viticulture and oenology. This is a special feature of Veneto: out of 100 Italian students enrolled in this type of programme, 17 are in Veneto, the highest share of all regions; Emilia Romagna follows with 12 students and then Tuscany with 11.
After obtaining the upper secondary school diploma, many students continue their education: in the academic year 2016/2017 in Veneto new students in an agricultural degree programmes there just under 800 in the total of 4,000 students, equal to 4% of all Veneto students. 770 students have completed a study programme obtaining a degree in an agricultural subject: this is an increase of about a third compared to five years before, and also in this case, agriculture is confirmed to be a distinctive feature for Veneto, which recorded the second highest share of graduates in the subject out of the national total in 2016 (10.2% preceded only by Lombardy with 16.5%). the majority of working people are self-employed
Continuing and work in the businesses run by their families; precariousness is widespread among employees - about one third of the total - with 42% of fixed-term employees, many of whom have contracts of less than six months. It is a predominantly male sector, with 79% of men, and the average age is around six years older than the other along the agri-food chain, from the agricultural production phase we move on to the industrial processing phase. In this field, 90% of workers are employees, including both withe and blue collars. Fixed term contracts are less common than in the agricultural sector, even if their number remains higher than the total number of workers in this phase (25% compared to 15%). This part of the supply chain is characterised by a low use of part time contracts, which stands at 14%. The percentage of women is certainly higher, although the percentage of men is still pre-

Fig. 8.6.1 - Trends of workers employed in the agri-food sector and in its individual phases (2011=100). Veneto - Years 2011:2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

Fig. 8.6.2 - Percentage of workers employed in the agri-food chain by stage of the chain and region - Year 2017



Source: Processing of data from ISTAT by the Statistics Office of Regione Veneto

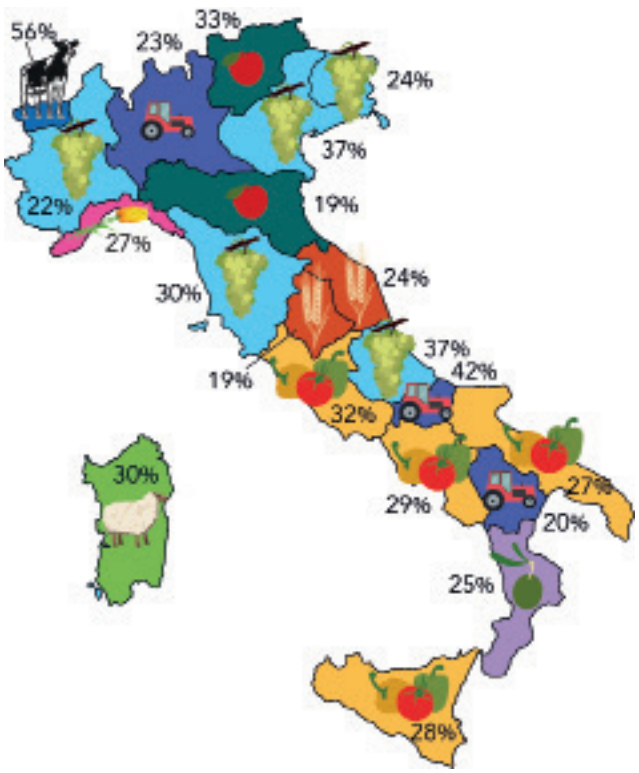
Region you go, specialty you find

dominant (60%). From a salary point of view, the production phase is the most profitable in the supply chain: the average salary of full-time employees reaches € 1,400 compared to € 1,200 in the production phase and € 1,250 in the distribution phase.

In agriculture, higher qualifications

Finally, in the last phase, that of distribution,

Fig. 8.6.3 - Agricultural sectors employing the greatest number of persons by region (*) - Year 2017



(*) The percentage indicates the share of people working in the top agricultural sector out of the total number of those working in agriculture by region.
Source: Processing of data from ISTAT by the Statistics Office

the percentage of employees is 71% and that of fixed-term workers is 28%. Two characteristic elements, partly related to each other, are the gender ratio and the use of part time contracts. The percentage of women, in fact, exceeds that of men (53% compared to 47%) and the share of part time contracts reaches 33% compared to 19% of total employment. This second aspect is partly justified by the first, i.e., by the greater presence of women who generally make more use of part time contracts. However, even limiting the analysis to women, the conclusions do not change: the share of part time workers remains higher in the distribution phase and is equal to 52% compared to 44% of the production phase and 31% of the processing phase.

In Veneto, the share of students in agricultural subjects is high

8.7 Responsible food production and consumption: why they are important

In 2015, the United Nations Assembly approved Agenda 2030 for Sustainable Development and 17 Sustainable Development Goals (SDGs) with the aim of eradicating extreme poverty and combating inequalities and injustices, paying the utmost attention to the environment to reduce climate change. The environmental clause is the key to sustainability as development can only be harmonious and inclusive if it is also guaranteed for future generations.
Among the priorities set out in the Agenda are responsible production and consumption, including of food, with a view to reducing global food waste: by 2030, global per capita food waste at retail and consumer levels should be halved and food losses along production and distribution chains should be reduced. FAO estimates[14] that worldwide there are 1.3 billion tonnes of food lost or wasted each year, about one third of the food produced, while at the same time, one billion people are malnourished, another billion are hungry and two billion are obese or overweight.
It is therefore acknowledged that food waste is one of the factors determining the "paradox of scarcity in abundance": entire countries and social groups are in a situation of food insecurity, i.e., have limited access to food of sufficient quality for a healthy and active life16, while at the same time there is sufficient food available to meet

More employee work during the transformation phase ...

14 United Nations Food and Agriculture Organisation.

the needs of all. At the same time, food waste is also an indicator of environmental non-sustainability as it is calculated that a huge amount of greenhouse gases (CO2) and fertilizers (Nitrogen) are used which have a significant impact on the health of the environment and the soil, and huge amounts of water are wasted to produce food that will never feed any human being.

But what is food waste?

... and more part time in the

That of food waste or food surplus is a very complex concept that does not only refer to domestic waste but also to waste that occurs throughout the food chain from production onwards. The agri-food chain is extremely long and consists of several phases. The first phase includes all the activities related to agricultural production, where waste can occur in terms of loss of production, i.e., differences between the expected production and those actually obtained, which may be due to over-exploitation of productivity, disease, infestation[15] and mistakes in treatment techniques. Harvesting time is also problematic as many vegetables and fruit are not harvested due to the industrial harvesting techniques used or because for commercial reasons they are not considered suitable for sale, thus constituting the so-called edible losses in the field. There are also losses due to storage,transport, storage and processing errors, where the products undergo industrial processing which, due to its intrinsic technological limits, produces waste. Furthermore, in the distribution phase, unsold food risks to become waste: incorrect marketing strategies or insufficient quality, packaging and aesthetic standards contribute to determining this further waste. The last phase is represented by the final consumption of catering and families, where the waste is mainly due to over purchasing and storage or preparation mistakes. As we can see, the issue of food waste is complex; definitions and approaches to the subject are currently still being developed. In a recent study, by examining the available literature and the most recent scientific research, Ispra[16] attempts to give a complete definition of waste, which in addition to all the items described also includes the use of edible products for animal feed or non-food purposes (as there is a net loss of calories with animal conversion), overfeeding (the difference between the amount of food that the person consumes and that which is really needed), nutritional quality losses (related to the degradation of the product at all stages of the food chain from product to consumption) and waste of drinking water.

Food waste as a paradox of scarcity in abundance

With this approach, a study carried out on data from 201118 estimatesthe total amount of waste at 1,900 kcal/per capita/day, a quantity approximately equivalent to the average reference requirement, with an increase of 15% compared to 2007. This is as much as 66% in terms of proteins: this means that on average, three times as much proteins is needed to reach the nutritional requirements and twice as much is wasted as would be needed. According to FAO data for Italy, waste including overfeeding could have been 1 400 kcal/per capita/day in 2015, 60% in terms of protein. It has also been calculated at a global level that, with food requirements growing by 0.1% per year, between 2007 and 2015 there was an annual increase in supplies of 1.3% and consumption of 1.4%, while waste grew by about

Prevention is better than cure

The analysis carried out therefore shows how, in defining waste, reference is first and foremost made to the surplus from overproduction and oversupply that is intrinsic to the prevailing food model. Consequently, waste prevention includes all those structural measures for the preventive reduction of the production of food surpluses. All other types of intervention, improvement of technological efficiency, food recovery and recycling, aimed at preventing the production of waste, are preferably referred to as the prevention or reduction of food waste. The latter are produced mainly downstream, i.e., once the supply has taken the road to distribution. A study by the Politecnico di Milano19 quantifies the extent of this waste in Italy at 3.5 million tonnes per year, 20% of which is due to the distribution

15 Fondazione Sussidiarietà, "Dar da mangiare agli affamati", Guerini e associati, 2012.

16 Istituto Superiore per la Protezione e la Ricerca Ambientale, 3.2% per year. In essence, the increase in human food requirement is responded to with excessive increases in food supplies and consumption, thus generating exponential increases in food waste.

phase and the remainder to family consumption and catering. The main causes of generating food waste by households are over purchasing or the incorrect storage or preparation, also due to the difficulty in interpreting the storage instructions. In the distribution phase, one of the main causes is the expiration of the products, but shipping errors, damage to the packaging and packaging errors also have an impact.

It is clear, however, that the most acceptable waste of food is that which has never been produced,

I.e., the most effective strategy for reducing waste is the structural prevention of surpluses. With regard to this, it has been observed that short, local, organic, supportive and small-scale food networks reduce intermediation, surpluses and waste, being more efficient than agro-industrial models for the same resources used. In addition, food is stored for longer, planning is better and consumers tend to develop a greater awareness of food processes and give more value to the food they purchase[17]. Therefore, the best path to follow "Spreco alimentare: un approccio sistemico per la prevenzione e la riduzione strutturali", Report no. 267, 2017 seems to be that of a greater planning, a reduction in the productive scale, an expansion of local ecological chains and a greater education towards food, which leads citizens to an environmental and social awareness towards the value of food reduction in food waste of 30% by 2025 and 50% by 2030". In order to prevent food waste, governments should also provide incentives for the collection and safe redistribution of unsold food products at all stages of the food supply chain, including to charities. In order to reduce food waste, it is also necessary to improve consumers' understanding of the expiry dates expressed as "use by" and "best before".

1,900 kcal / per capita / day the amount of food waste

It is necessary to be able to correctly quantify food waste in Europe in order to assess progress towards its reduction; the European Commission has therefore launched the EU Fusions Project with the aim of developing a common European methodology for measuring food waste and defining appropriate indicators.

17 "Public bodies as well as private bodies set up for the non-profit pursuit of civic and solidarity purposes" (Art. 2 letter b).

Recovery of surplus to contain food poverty

After years of negotiations, on 18 April 2018 the European Parliament finally approved the Circular Economy Package, which takes Europe from a linear economic model to one where waste prevention, recycling and intelligent disposal enter the production cycle, in a virtuous circular process of growth and respect for the environment. New waste targets were also set, which are legally binding on the Member States.

For the first time, the concept of food waste and the commitment to reduce it are explicitly included in EU legislation. The EU had already committed itself internationally to reducing food waste, however, prior to today and in 2016, the second European country after France, Law 166 (Gadda Law) was issued, which aims to "encourage the recovery and donation of pharmaceuticals and other products for the purpose of social solidarity". The law calls for "actions to reduce waste production and promote reuse and recycling in order to extend the life cycle of products" and promotes "research activities, information and awareness of consumers and institutions". This law allows economic operators to donate surplus food suitable for human consumption to "donees"[18] who must allocate this foodstuff primarily to poor people. The law allows donations of products that have passed the minimum conservation period22 , as long as the integrity of the primary packaging and the appropriate conservation conditions are guaranteed, and guarantees operators a tax discount proportional to the quantity of food donated.

Acceptable rejection is what it is not product

The Gadda Law is therefore intended to mitigate the downstream effects of food waste, intercepting those products that do not reach the consumer in the final phase of the industrial chain. Since this law is primarily aimed at the nutrition of poor people, it can be considered there was no specific reference in European legislation. In implementation of the UN Agenda 2030, it is required that Member States should aim to achieve an indicative EU-wide an act of emergency, however, it does not resolve inequality nor the reduction of waste production.

Among the projects presented for the redistribu-

18 Highlighted by the words "best before"

tion of food surplus by already existing networks, that of solidarity shops (Emporio della Solidarietà) is being promoted to create an innovative model to be spread throughout the region. In order to remove overlaps due to
fragmentation of actions and use resources in the

Tab. 8.7.1 - Waste and efficiency between

	Sistemi alimentari industriali	Sistemi con filiere corte, locali, biologiche	Sistemi agroecologici locali, di piccola scala con reti solidali
Spreco alimentare convenzionale (%) (a)	40-60	15-25	5-10
Efficienza a parità di risorse impiegate (% rispetto ai sistemi industriali)	100	200-400	400-1200

(a) conventional: loss of production, pre-harvest losses, overfeeding, livestock uses are not taken into account. Value as a % of energy/mass production.
Source: Ispra

mostsis24 has shown that in Italy there are more than 2 million efficient way, the Emporio Solidale serves as households (about 8%) in food poverty, i.e., people who may spend less than an acceptable standard threshold on the purchase of food. Food poverty is more widespread in the South (about 9% of families) and among families whose parents are unemployed (17.5%) or from abroad (14.1% against 7.5% of those whose parents are Italian). Moreover, it affects more young millennial families (14%) than those of the baby boomers (8.3%) and the elderly (6%).
11.8% of families, on the other hand, cannot afford an adequate protein-based meal of meat, fish or vegetarian equivalent at least once every two days (5.7% in Veneto), and this value has increased by about 87% in the last 10 years.
The work undertaken by the Fondazione Banco Alimentare, a foodbank that collects food and recovers food surpluses from agricultural and industrial production and redistributes them to structures that provide assistance to the poorest people, is noteworthy. Fondazione Banco Alimentare is made up of 21 regional organisations and in 2016 it supported 8,035 welfare structures throughout Italy, bringing food aid to more than 1.5 million people.

Solidarity shops in Veneto25

Veneto has proved to be a forerunner of national legislation in the field of policies to combat poverty and social hardship. As early as 2011, with Regional Law no. 11, Veneto intended to recognise, enhance and promote the recovery of food surpluses, using centre for the collection and distribution of food surplus to local associations, thus operating in coordination with Banco Alimentare.
The Banco Alimentare has been active in the Veneto since 1989 and in 2017 it recovered and handled 5.3 thousand tonnes of food products, distributing them to 492 accredited charities and employing 102,904 people. In addition, as of end of 2017 active solidarity shops (Emporio Solidale) were 11 and 4 were in the process of being set up as a part of a charity network for the distribution of food surplus.

The Gadda law on food donations

Considering the Banco Alimentare and solidarity shops altogether,
it is estimated that a total of 6.4 thousand tonnes of food were distributed last year, supporting about 32 thousand families for a total of 142 thousand people, who have regularly received regularly received free of charge shopping and other aid thanks to the recovery of surplus food from large and medium-sized retailers.
Every year, Regione Veneto contributes to financing the Banco Alimentare and Emporio Solidale network, including with the supply of products that are not usually donated (such as meat, fish and legumes) in order to ensure a balanced diet, promote appropriate lifestyles and nutritional education. The amount allocated at the end of 2017 was 490 thousand euros.
Emporio Solidale is a social project that provides a distribution service of basic necessities, organised as a real supermarket, within which beneficiaries can obtain autonomously and according to their needs, food and non-food products, according to the measure agreed with the social welfare institutions that develop the support project. It is aimed at families in conditions of economic hardship, with a particular focus on families with children under 2 years of age. The eligibility criteria take into account the ISEE (Equivalent Financial Situation Indi-

cator), the costs not covered by it and the urgency of the intervention.
Access is granted by means of a card to which points are assigned that represent the equivalent value for the purchase of the chosen products, according to a maximum spending limit for the household. In fact, each product is attributed a certain number of points based on market price and nutritional characteristics: few points to the healthiest foods, such as fruits and vegetables, in order to encourage their purchase, while more points for less healthy foods. The possibility for the family to choose which products to buy allows them to decide by themselves what they need and thereby stimulate a relationship of trust with the association and ensure a process of empowerment for the family.

In Italy 2 million families in food poverty

Access is subject to an interview with the authorised regional centres, in order to determine the socio-economic conditions of the family, assess its need and potential and draw up the support project. In addition to the distribution of food products, supportive measures, training, education and even job placements are planned. In addition to the traditional listening points (typically social services, Caritas, etc.), centres have been set up throughout the region that have no "official" status, in order to intercept people who have recently fallen into a state of need, are " impoverished ", and who may have some form of fear or shame to turn to the classic welfare structures. These activities are, of course, coordinated and integrated into the network.

In Veneto 141 thousand people followed by Empori Solidali

The surplus recovery programme to deal with the food emergency is in synergy with the Regional Waste Reduction Programme approved in 2015, which provides incentives for businesses to recover unsold goods with a reduction in the waste tax and awareness-raising activities in order to create a network with associations, bodies and administrations.

Not just the market, the Emporium is empowerment e accompaniment

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Chapter 1
Carla Pesce
Chapter 2
Carla Pesce, Massimiliano Baldessari, Giorgia Faggian, Antonella Trabuio e contributi di:
Sottocapitolo 2.2, Agenzia Veneta per l'Innovazione nel Settore Primario – Veneto Agricoltura: Renzo Rossetto, Nicola Severini e Gabriele Zampieri
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Chapter 3
Elena Santi
Chapter 4
Nedda Visentini, Desirè Molin, Alessandra Padoan
Chapter 5
Nedda Visentini, Desirè Molin, Alessandra Padoan, Patrizia Veclani
Chapter 6
Lorenzo Mengotti e contributi di:
Arpav: Marco Monai, Adriano Barbi, Francesco Rech
Chapter 7
Cinzia Viale, Diego Gasparini, Lorenzo Mengotti, Antonella Trabuio e contributi di:
Sottocapitolo 7.4: Regione del Veneto - Direzione Infrastrutture Trasporti e Logistica: Mauro Menegazzo, Cecilia Pavan, Elena Romano, Ivan Fava
Chapter 8
Carla Pesce, Cinzia Viale, Nedda Visentini, Massimiliano Baldessari, Giorgia Faggian, Elisa Mantese, Desirè Molin, Elena Santi, Antonella Trabuio, Patrizia Veclani e contributi di:
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