Tracking
Global trade wars

Industry Roadmap
Law on Knowledge Economy, a big step forward

Zooming
At a glance: Knowledge-based services in Argentina

Global Coordinates
Why inflation is so low in advanced economies?
The world is moving towards the fourth industrial revolution. Unlike past revolutions, this one is not characterized in itself by the advent of new technologies, like the most recent digital revolution, but by the emergence of business models and systems built on it.

We are talking about revolution 4.0, where robotics, virtual reality, artificial intelligence and, overall, knowledge-based services are protagonists and bring along with them the ability to reshape the ways of production under more integrated, flexible, connected and collaborative systems. Against this backdrop, Argentina still has a rich economic and cultural heritage that opens up a window of opportunity for integration into the global economy, positioning itself as a global provider of knowledge-based services.

Like any change, the process will bring benefits on the one hand, and the need for adaptation, on the other hand. However, if an appropriate articulation among the different players is achieved, the spillover effect of the more dynamic and integrated sectors on the economy should facilitate the process of change in those industries that will have to adapt, so that they can boost their productivity and capture the benefits offered by this revolution 4.0.

In this context, both the public and private sectors have a crucial role. The State should create the conditions for the development of the private sector, by promoting education and paving the road for the reconversion of the productive force, as well as opening markets. As far as the private sector is concerned, it should focus on innovation and investment in companies rising to and taking on the challenges posed by this revolution.

Meanwhile, the two economic giants worldwide, the United States and China, are battling it out for the leading position in this regard. The daily minor skirmishes between these two economies are barely one of the ways in which their trade war is materialized.

Against this background, Argentina must define its strategy as a country facing the new world, reaching a delicate equilibrium among these multiple factors.

Today, population and political leaders would seem to be more focused on short-term macro problems and the presidential elections taking place by the end of the year. Yet, the Law on the Promotion of Knowledge Economy, recently enforced, fine-tunes a government policy, and it is going in the right direction. These are the first steps in a long journey.

José María Segura
Chief Economist
Tracking

Global trade wars

The US is immersed in a series of trade wars, primarily with China, its biggest trading partner. These disputes go beyond the geographical boundaries of these two giants, with an impact on the rest of the world.

Industry Roadmap

Law on Knowledge Economy, a big step forward

The passing of the Law on Knowledge Economy on May 22 is a big step forward. This law not only connects the different actors exporting knowledge-based services in Argentina, but also entails the adoption of a government policy, which is essential for economic development, employment generation and for the insertion of our country in the international context.

Zooming

At a glance: knowledge-based services in Argentina

With the passing of the Law on Knowledge Economy on May 22, a new lease of life was given to a sector that is relevant to economic development. Below we summarize the most salient characteristics of the sector from the economy viewpoint.

Global Coordinates

Why inflation is so low in advanced economies?

Inflation was the enemy of policy makers for many generations, as it reduced living standards and the value of savings. In the past, many of the world’s largest economies endured periods of double-digit interest rates to avoid skyrocketing prices. However, during the past decade, inflation has not only become tame but also sluggish. So, what has been happening?
The US is immersed in a series of trade wars, primarily with China, its biggest trading partner. These disputes go beyond the geographical boundaries of these two giants, with an impact on the rest of the world.

The US economy has run a continuous trade in goods deficit since 1976, which increased significantly as from the mid-1990s and, especially from the beginning of the 21st century, when China became a member of the World Trade Organization (WTO). One of the objectives of the current US administration is to reduce such deficit by adopting certain protectionist measures.

Particularly, the US presents a mammoth deficit with its four biggest trading partners, China, Mexico, Japan and Canada, with China being the most emblematic affair, representing 47% of that deficit.
The plans announced by the US in 2018 to impose tariffs of 10% and 25% on steel and aluminum, respectively, on the grounds that these industries had been seriously affected by bad policies and unfair trade for many years were a starting point for this trade conflict. At first, Canada and Mexico remained exempt because, in addition to maintaining strong political relations with the US, they were renegotiating the terms of the North American Free Trade Agreement (NAFTA). The European Union (EU), considered an international trade partner, was not initially affected either. However, towards the end of May, the US announced that those countries would not be exempted, which gave rise to a period of “reciprocity” on the part of the affected countries.

Mexico announced retaliatory tariffs of up to 25% on imports of steel, pork, cheese, apples and potatoes from the US (USD 3.0 billion of American products). In turn, Canada applied restrictive countermeasures on trade in American goods for USD 12.8 billion, imposing tariffs of 25% on a variety of steel products. This is an important measure if we consider that approximately 50% of US exports of steel are destined for Canada. Furthermore, Canada imposed tariffs of 10% on many products, mostly foodstuffs and beverages. In return, the EU imposed measures for USD 3.4 billion, applying tariffs on a number of products, such as Whisky Bourbon and orange juice.

The most emblematic and conflicting affair, however, is China, where there seems to be more than one reason for the dispute. The Asian giant is the US biggest trading partner; it sells 22% of what the US buys and represents 47% of the US deficit.

Amid allegations of disloyal trade practices, the Trump administration announced in March 2018 its intention to impose tariffs on imports of goods from China for USD 50.0 billion. Towards July 2018, the US decided to follow up on its initial intention and implemented tariffs ranging from 10 to 25% on a total of 818 Chinese products, including steel, aluminum and foodstuffs, among others. In response to that measure, that day China equaled the tariff amount on 659 American products, including automobiles, soy and whisky. The conflict persisted and in August, the US levied new tariffs of 25% mostly on electronic components and industrial machinery, making a total of USD 16.0 billion. China reacted with an almost identical measure: tariffs of 25% on 333 American products for an amount of USD 16.0 billion.
This trade war with China has escalated. Soy is a clear example: China reduced its imports of soy from the US by 49% during 2018, compared with 2017, and in the first quarter of this year the demand for soy fell 80%, compared with the same period of last year (graphic 4).

The large trade imbalance and the subsidies the Asian country grants to its state-owned enterprises, which allow them to compete in industries overseas, are among the US arguments to go ahead with this conflict. The Chinese government has also launched the “Made in China 2025” plan, which seeks to expand and make China dominant in different sectors, including artificial intelligence, robotics and the pharmaceutical industry.

The US-China trade war might have serious consequences, mainly in the high-tech sectors, posing a threat to the major technology firms in those countries. In this regard, the US listed some of the main Chinese technology and communications companies with which the US companies cannot work. In response, China is considering the possibility of imposing a ban on exports of rare-earth minerals1 to the US. The Asian country is the world’s largest producer of these minerals, which are essential for the good quality of technology products, the source of technological innovations and green industries. Solar panels, hybrid electric vehicles, hard disks and smart telephones are some examples of equipment that use rare-earth inputs.

---

1 The 17 rare-earth elements are scandium, yttrium and the 15 elements of the lanthanide series (lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium).
These conflicts have consequences not only for these countries’ economies, but for the international community as well.

The Organization for Economic Cooperation and Development (OECD) forecasts that the world economic growth rate will slow down due to the decline in the international trade flows. The imposition of tariffs makes international trade more expensive and this has implications not only for consumers, who will have to pay more for certain goods due to the higher costs charged by the importing companies, but also for the industries, in view of the threat to their production and sales.

This trade conflict has created uncertainty in the financial markets throughout last year and in the 2019 year-to-date. As shown by graphic 5, each announcement of tariff measures by the US put the markets in a bearish mood. A similar reaction is seen with the country risk indicator for the emerging economies. Argentina has not been the exception.
This is no small challenge for Argentina. China is the second target for Argentine exports, and the US is the third. The US is one of the main financing providers, especially with the support received from the IMF, a delicate balance Argentina requires to cope with such a situation.

The country had already suffered in the first half of 2018 the consequences of those conflicts when the appreciation of the dollar and the retrenchment of capital flows from the emerging markets followed the trade barriers. A proper understanding of this new global context is key to designing Argentina’s development strategy in the coming years.
Industry Roadmap

Law on Knowledge Economy, a big step forward

The export of knowledge-based services employs more than 400,000 people and exports more than USD 6 billion per annum. It involves activities with high use of technology and human talent qualified in activities such as computing services and software development, audiovisual production, biotechnology, engineering, professional services, among others.

It generates skilled employment and it is the source of foreign currency, which contributes to the development of our country and ranks it in a better position to remain competitive with other talented historical exporters like India, Panama, Poland, China and Philippines, among others. Until now, highly-qualified Argentine talent used to stand out compared with other competitors, although the costs for operating a services export center in Argentina were volatile, high and subject to the economic upheavals.

The passing of the Law on Knowledge Economy on May 22 is a big step forward. This law not only connects the different actors exporting knowledge-based services in Argentina, but also entails the adoption of a government policy, which is essential for economic development, employment generation and for the insertion of our country in the international context. It is likely that more than 3,000 Argentine companies (among large, medium, small and start-up businesses) will benefit from this Law.

If a company falls within the scope of the Law, based on its knowledge-based services export activities, there are in turn certain requirements related to the application of continuous improvements, investments in innovation and development, as well as ongoing training. As for the benefits it offers to improve the competitiveness of the sector, basic exemptions for social security taxes are forecast to increase while the income tax rate is expected to be reduced. A relief on local income tax is also expected for payments made on account of the same income in the country of destination. Besides, to achieve fiscal stability, no other taxes will be imposed and tax rates in effect as from the implementation of the law and for the next ten years will not be raised. All this stimulates investment, which in the case of this specific industry is not devoted to machinery but rather to employment generation.

The positive implications of this law compensate, in part, the negative implications of export duties in effect since the beginning of 2019, which we expect will be eliminated two years after their application, as announced by the Government at the moment they were created. When this happens, the improvement in competitiveness and the generation of skilled employment will gain momentum again. We have to be proud of having embarked on this path.

By Mario A. Julio, partner in PwC Argentina and General Manager of Argentina Acceleration Center
With the passing of the Law on Knowledge Economy on May 22, a new lease of life was given to a sector that is relevant to economic development. Below we summarize the most salient characteristics of the sector from the economy viewpoint.

Current lifestyles are increasingly developing in a context where the availability of information has reached unprecedented levels. This development creates new business models that use this information, with the possibility of delocalizing functions and tasks, extending the scope of services to other geographical areas and improving their characteristics. This digital transformation is rapidly changing societies and their economies, generating tensions and frictions due to the changes it brings about.

One of the sectors most directly related to these changes is the so-called knowledge-based industry (KBI). This industry comprises a set of human capital-intensive activities with a relatively high level of qualification, that generally requires the use of information and communication technologies\(^1\), where access to data is a key input.

This industry is gaining relevance and prominence at a global level. In 2018, six of the ten companies with the highest market value in the world were related to the KBI and comprised digital services, such as Amazon, Google, Facebook and Alibaba, or a mix of digital services and hardware, such as Apple and Microsoft\(^2\). In turn, among the companies listed in some of the major US stock exchanges, eight of the ten fastest growing ones in 2018 are KBI, mainly software development, TCI services, health and financial services\(^3\). Something similar happens in trade. Seven of the ten SMEs in Great Britain with the highest growth in their exports in 2017 are KBI suppliers, mainly software, digital content and consulting\(^4\).

In Argentina, this sector has also shown a high level of dynamism in recent years, increasing the size of the innovated ecosystem and generating five “unicorns” (technology start-ups that reach a market valuation above one billion dollars).

Although the KBI is not clearly delimited as such in official statistics, a common deficiency in most countries, it is possible to infer its size indirectly. Thus, considering the activities of business, professional and technical services, software and computer services and personal, cultural and recreational services, in 2018\(^5\) the sector employed 434,000 professionals. Observing its evolution, in the last 20 years it rose from representing 4.8% of total private employment to 6.6% at present, growing at a compound annual rate of 4%, compared with 2.3% for total private employment.

Furthermore, the jobs created by this industry offer above-average salaries. That is to say, it is a labor-intensive industry with skilled and relatively well-remunerated employees. Graphic 3 shows how the real salary of total formal sector employees was always below that offered by the KBI (weighted salary of the number of workers of each of the sectors mentioned). In this regard, among the sectors that make up the KBI, some are between 10% and 54% above the average of the total economy.

---

\(^1\) Pursuant to the definition provided by the Knowledge Economy Observatory.
\(^3\) http://fortune.com/100-fastest-growing-companies/
\(^4\) https://www.fasttrack.co.uk/league-tables/sme-export-track-100/league-table/
\(^5\) Up to and including the third quarter of 2018 (latest information available)
GRAPHIC 2
Share of employment by sector within KBI, %

Source: Prepared by the authors, based on information from the Observatory of Employment and Business Dynamics, Ministry of Production and Labor

GRAPHIC 3
Salary in pesos of 2018, total registered private sector and KBI

Source: Prepared by the authors, based on information from the Observatory of Employment and Business Dynamics, Ministry of Production and Labor

GRAPHIC 4
Salary of the sectors making up KBI, 2018 vs. total economy (straight line), 2018

Source: Prepared by the authors, based on information from the Observatory of Employment and Business Dynamics, Ministry of Production and Labor
One of the characteristics of KBIs is that their international trade is permitted. Thus, activities that were typically thought of as local and non-tradable, as was the case with services, can suddenly compete internationally and expand their markets.

From a foreign trade perspective, the balance of payments has shown a trade deficit since 2006\(^6\). However, for the same period the items that are part of the knowledge-based services has had a surplus (with the sole exception of 2014). Likewise, when we observe the share of exports of the KBI sector vis-à-vis total exports of services, it has grown by 10 percentage points between 2006 and 2018, from 30% to 43% at present.

Within the sector, the distribution of the generation of foreign currency has not been homogeneous. More than 60% is generated by exports of business, professional and technical services; around 30% by software and computer services, and the rest by personal, cultural and recreational services, and charges for the use of intellectual property.

---

\(^6\)Date on which INDEC started to publish this series.
Compared with the goods sector, in 2016 and 2017 the generation of foreign currency by the KBI exceeded that of the automotive industry, since it reached USD 5.74 billion and USD 6.67 billion vs. USD 5.53 billion and USD 6.34 billion, respectively, only behind the oleaginous and cereal industry, while in 2018 it ranked fourth.

More relevantly, measured in real terms, exports by the KBI sectors have shown greater dynamism than exports of traditional goods. Thus, while exports of goods have been stagnating since 2011 in real terms, those of KBI have managed to grow since 2015, as shown in Graphic 8.

---

7 Exports in dollars of each year, measured in pesos at current value, were used in the calculation, and then they were deflated due to inflation.
The growth of sectors related to the KBI underlines the pressing need to review and update regulatory frameworks that were clearly intended for business models that belong to the past. If the KBI continues to develop in Argentina, and increasingly more platform-based business models arise, together with the associated regulatory, tax and labor issues, to name a few, they will necessarily have to be included in the discussion. This debate is emerging not only in Argentina, but in most of the developed economies. Given the global logic of many of these new businesses, it is possible that regulations will require the coordination of more than one government agency and, often, of different jurisdictions.

The potential of this sector in Argentina’s development strategy, and its ability to generate skilled employment and value-added exports, is becoming increasingly clear. The challenge is to maintain the necessary conditions for its promotion and for the continuous improvement of competitiveness.
Inflation was the enemy of policy makers for many generations, as it reduced living standards and the value of savings. In the past, many of the world’s largest economies endured periods of double-digit interest rates to avoid skyrocketing prices. However, during the past decade, inflation has not only become tame but also sluggish. So, what has been happening?

According to the most recent report published by PwC UK, central banks in advanced economies have come to a consensus to reach an annual inflation of around 2% yearly. This inflation level is attractive, since it provides a reasonable buffer against deflation and is likely to require interest rates over zero, which gives some reward to savers and also allows interest rates to be cut to boost an economy during a recession. But, nowadays there is little evidence that any of these economies are capable of achieving a steady inflation rate of 2%.

The current low or zero inflation environment results from two sets of factors. First, there are those driven by economic policy, and second, those that are way beyond its scope. Taking into account the first group, it is becoming increasingly evident that the US Federal Reserve has overestimated the threat posed by inflation. Although the Fed is committed to a 2% inflation target, it has raised its interest rates nine times since the end of 2015, and prices have only exceeded the 2% in nine out of the 37 months since then, thus showing a preference for keeping inflation below, rather than above 2%.

In Europe, the European Central Bank (ECB) has kept an easing monetary policy, but inflation has been weak. Currently, the regional economy is fragile, but even when it grew abruptly in 2018, the core inflation remained close to 1%. The ECB, as well as the Fed, believes that a lower unemployment rate would drive up wages and prices, accordingly. However, the evidence in this sense is not consistent. The bond seems clearer in the Netherlands, where unemployment is at 3.3% and inflation at 2.9%, than in Germany, where the unemployment rate is 3.4% and inflation 1.4%. In comparison with the United States, European fiscal policy was not loosened in response to the financial crisis and it has been tightened much more since then. More buoyant public spending may help generate more robust domestic demand, thus giving rise to inflation.

In turn, the Bank of Japan has taken monetary policy to its limits seeking higher prices, with assets worth more than GDP. However, inflation has barely shown signs of reaction.

The years of low borrowing costs have not seduced companies into investing and testing the economy’s capacity. Nor has inflation been brought in from other countries; the yen has kept its value against the US dollar in recent years. Rather the root cause may simply be a matter of expectations: nobody in Japan behaves as if prices are about to rise, so prices remain static.

The second set of factors are exogenous, among them: the erosion of trade union membership has weakened workers’ bargaining power. The proportion of workers belonging to a union in the UK has dropped from around 40% to 20% in the last three decades and in the United States from around 20% to 10% in the same period. In turn, the prices of commodities, another potential source for advanced economies consuming much energy, have also been low in recent years.

The Fed is reviewing its monetary policy framework amid concerns that its target, combined with moderate global growth, has effectively put a cap on inflation. An option could be to change to a long-term average inflation target of 2%, which would consider recent past periods when inflation had fallen below this level. As a result, the Fed would make its inflation target truly symmetrical. However, it remains to be seen if central banks exert the influence to boost global demand. The past decade’s experience suggests reasons to be skeptical.
Inflation

Exchange rate: spot and futures

Price of Soy and Oil, index2004=100

Reserves and Central Bank Assets

Real Exchange Rate Index: base Dec-99=1

Monthly Industrial Estimator

Foreign Trade

Income and Expenses of the National Non-Financial Public Sector

Source: Own calculations based on CPI Congress and UTD
*CPI Congress. As of November 2016 it is considered CPI City of Buenos Aires

Source: Own calculations based on Rofex

Source: own calculations based on CBOT y WTI NYMEX

Source: own calculations based on Central Bank

Source: own calculations based on the Argentine Central Bank

Source: own calculations based on INDEC

Source: own calculations based on INDEC

Source: own calculations based on Secretary of Finance
### Activity and Prices

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP, var % y/y</td>
<td>-1.8%</td>
<td>2.7%</td>
<td>-2.5%</td>
<td>-</td>
<td>-5.8%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CPI Federal Capital, var % y/y</td>
<td>41.0%</td>
<td>26.1%</td>
<td>45.5%</td>
<td>49.7%</td>
<td>52.5%</td>
<td>53.4%</td>
<td>54.7%</td>
</tr>
<tr>
<td>CPI San Luis, var % y/y</td>
<td>31.4%</td>
<td>24.3%</td>
<td>50.0%</td>
<td>55.2%</td>
<td>58.0%</td>
<td>59.4%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Industrial Production, var % y/y</td>
<td>nd</td>
<td>2.5%</td>
<td>-5.0%</td>
<td>-8.5%</td>
<td>-13.4%</td>
<td>-8.8%</td>
<td>nd</td>
</tr>
<tr>
<td>International Reserves (end period, USD mn)</td>
<td>39,308</td>
<td>55,055</td>
<td>65,806</td>
<td>68,015</td>
<td>66,187</td>
<td>71,663</td>
<td>64,779</td>
</tr>
<tr>
<td>Import Cover (month of reserves)</td>
<td>8.44</td>
<td>9.87</td>
<td>12.07</td>
<td>16.99</td>
<td>16.74</td>
<td>17.17</td>
<td>13.95</td>
</tr>
<tr>
<td>Implicit exchange rate (M0 / Reserves)</td>
<td>20.81</td>
<td>18.34</td>
<td>21.41</td>
<td>20.63</td>
<td>20.42</td>
<td>19.58</td>
<td>20.94</td>
</tr>
<tr>
<td>$/USD, end period</td>
<td>15.85</td>
<td>18.77</td>
<td>37.81</td>
<td>39.00</td>
<td>43.35</td>
<td>44.01</td>
<td>44.87</td>
</tr>
</tbody>
</table>

### External Sector

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports, USD mn</td>
<td>57,879</td>
<td>58,622</td>
<td>61,620</td>
<td>4,464</td>
<td>5,136</td>
<td>5,313</td>
<td>6,017</td>
</tr>
<tr>
<td>Imports, USD mn</td>
<td>55,911</td>
<td>66,930</td>
<td>65,443</td>
<td>4,004</td>
<td>3,953</td>
<td>4,174</td>
<td>4,644</td>
</tr>
<tr>
<td>Comercial Balance, USD mn</td>
<td>1,969</td>
<td>-8,308</td>
<td>-3,823</td>
<td>460</td>
<td>1,183</td>
<td>1,139</td>
<td>1,373</td>
</tr>
<tr>
<td>Currency liquidation by grain exporters, USD mn</td>
<td>23,910</td>
<td>21,399</td>
<td>20,202</td>
<td>1,290</td>
<td>1,143</td>
<td>1,915</td>
<td>2,395</td>
</tr>
</tbody>
</table>

### Labor*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment, country (%)</td>
<td>7.6</td>
<td>7.2</td>
<td>9.1</td>
<td>-</td>
<td>10.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unemployment, Greater Buenos Aires (%)</td>
<td>8.5</td>
<td>8.4</td>
<td>10.5</td>
<td>-</td>
<td>11.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Activity rate(%)</td>
<td>45.3</td>
<td>46.4</td>
<td>46.5</td>
<td>-</td>
<td>47.0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Fiscal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income, $mn</td>
<td>2,070,154</td>
<td>2,578,609</td>
<td>3,382,644</td>
<td>330,891</td>
<td>327,870</td>
<td>357,362</td>
<td>444,250</td>
</tr>
<tr>
<td>VAT, $mn</td>
<td>583,217</td>
<td>765,336</td>
<td>1,104,580</td>
<td>103,782</td>
<td>108,397</td>
<td>117,200</td>
<td>126,173</td>
</tr>
<tr>
<td>Income tax, $mn</td>
<td>432,907</td>
<td>555,023</td>
<td>742,052</td>
<td>69,441</td>
<td>60,690</td>
<td>72,783</td>
<td>129,056</td>
</tr>
<tr>
<td>Social Security System, $mn</td>
<td>536,180</td>
<td>704,177</td>
<td>878,379</td>
<td>85,784</td>
<td>85,692</td>
<td>91,289</td>
<td>90,691</td>
</tr>
<tr>
<td>Export Tax, $mn</td>
<td>71,509</td>
<td>66,121</td>
<td>114,160</td>
<td>17,592</td>
<td>18,166</td>
<td>23,820</td>
<td>38,425</td>
</tr>
<tr>
<td>Primary expenses, $mn</td>
<td>1,790,789</td>
<td>2,194,291</td>
<td>2,729,251</td>
<td>234,451</td>
<td>257,269</td>
<td>260,669</td>
<td>274,649</td>
</tr>
<tr>
<td>Primary result, $mn</td>
<td>-343,526</td>
<td>-404,142</td>
<td>-338,987</td>
<td>6,726</td>
<td>-13,037</td>
<td>499</td>
<td>25,974</td>
</tr>
<tr>
<td>Primary result, $mn</td>
<td>185,253</td>
<td>308,048</td>
<td>513,872</td>
<td>14,877</td>
<td>57,628</td>
<td>78,173</td>
<td>74,473</td>
</tr>
<tr>
<td>Fiscal results, $mn</td>
<td>-474,786</td>
<td>-629,050</td>
<td>-727,927</td>
<td>-4,906</td>
<td>-49,838</td>
<td>-66,073</td>
<td>-38,634</td>
</tr>
</tbody>
</table>

### Financial - interest rates***

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Badlar - Privates (%)</td>
<td>20.04</td>
<td>23.18</td>
<td>48.57</td>
<td>37.91</td>
<td>41.27</td>
<td>48.50</td>
<td>52.44</td>
</tr>
<tr>
<td>Term deposits $ (30-59d Private banks) (%)</td>
<td>19.51</td>
<td>21.80</td>
<td>46.22</td>
<td>36.83</td>
<td>39.83</td>
<td>46.17</td>
<td>50.35</td>
</tr>
<tr>
<td>Mortgages (%)</td>
<td>19.70</td>
<td>18.61</td>
<td>47.70</td>
<td>41.63</td>
<td>44.94</td>
<td>43.81</td>
<td>56.84</td>
</tr>
<tr>
<td>Pledge (%)</td>
<td>20.82</td>
<td>17.42</td>
<td>24.88</td>
<td>25.57</td>
<td>22.60</td>
<td>22.97</td>
<td>23.42</td>
</tr>
<tr>
<td>Credit Cards (%)</td>
<td>44.45</td>
<td>42.21</td>
<td>61.11</td>
<td>63.03</td>
<td>62.23</td>
<td>63.26</td>
<td>66.17</td>
</tr>
</tbody>
</table>

### Commodities****

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Soy (USD/Tn)</td>
<td>362.6</td>
<td>358.9</td>
<td>342.3</td>
<td>334.5</td>
<td>329.2</td>
<td>324.2</td>
<td>305.3</td>
</tr>
<tr>
<td>Corn (USD/Tn)</td>
<td>141.1</td>
<td>141.4</td>
<td>145.0</td>
<td>147.2</td>
<td>144.3</td>
<td>140.8</td>
<td>149.5</td>
</tr>
<tr>
<td>Wheat (USD/Tn)</td>
<td>160.3</td>
<td>160.2</td>
<td>182.1</td>
<td>183.5</td>
<td>166.6</td>
<td>165.5</td>
<td>168.2</td>
</tr>
<tr>
<td>Oil (USD/Barrel)</td>
<td>43.3</td>
<td>50.9</td>
<td>64.9</td>
<td>55.0</td>
<td>58.2</td>
<td>63.9</td>
<td>60.9</td>
</tr>
</tbody>
</table>

* Quarterly figure. The year corresponds to Q4
** Includes intrasector public interest
*** Data 2012/13/14 corresponds to the daily weighted average of December
**** One moth Future contracts, period average
p: provisional

Source: INDEC, Secretary of Finance, Ministry of Economy, BCRA, AFIP, Unión por Todos, CIARA, CBOT, NYMEX
## Our services

<table>
<thead>
<tr>
<th>Macroeconomic analysis</th>
<th>Sectorial/Quantitative</th>
<th>Litigation</th>
<th>Regulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly/quarterly report</td>
<td>Follow up and projection by sector</td>
<td>Support of experts’ reports relating to economic matters</td>
<td>Tax benefits</td>
</tr>
<tr>
<td>Conferences</td>
<td>Quantification of demand</td>
<td>Dumping</td>
<td>Benefit/price structure</td>
</tr>
<tr>
<td>Projections and data</td>
<td>Applied econometrics</td>
<td>Antitrust</td>
<td>Quantification of impacts</td>
</tr>
<tr>
<td></td>
<td>Revenue forecast</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surveys</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Contacts

**José María Segura**  |  jose.maria.segura@ar.pwc.com  |  +54 11 4850 6718  
**Leandro Romano**  |  leandro.romano@ar.pwc.com  |  +54 11 4850 6713  
**Paula Lima**  |  paula.lima@ar.pwc.com  |  +54 11 4850 6028  