N° 56 - December

Economic GPS

pwc

An orderly transition, but with questions

From a historical perspective, the presidential transition that took place in December seems auspicious, and we hope that it will be the beginning of a new era in our young democracy. In the short term, this political fact did not cause the turbulence envisioned in the prior months.

The foreign exchange measures implemented by the outgoing administration and the smoothness on the part of the incoming authorities were able to remove some initial uncertainties.

From now on, the new government has to rebuild trust and design the political and economic landscape of the next years. The fiscal situation is at the heart of the issue and its counterpart, the external debt, is the most urgent matter. The Executive Branch has so stated it. In this sense, the Bill sent to the Congress, which was passed in less than two weeks since the president took office, is mainly focused on tax creation and increase, seeking to swell the Government coffers, and cost reduction and reallocation.

With this program, the Executive Branch may achieve a primary result in 2020, whereby, without immediate economic disruption, it temporarily suspends capital and interest payments, or both, with the purpose to begin discussions on a new debt manageable profile with creditors.

In the meantime, with the new expenses scheme, the government will try to boost consumption, tax collection and level of activity, thus strengthening the economy and the fiscal balance before dealing with the renegotiation process with both multilateral and private creditors.

In economy, nothing should be taken for granted. Hence, this path is not exempt from risks. The time taken by the public sector to regain access to the financial market will have an impact on the possibilities of the private sector and, therefore, on investment. Additionally, the new withholding tax scheme may affect the generation of dollars needed to maintain a trade surplus, which will require a more competitive exchange rate. In turn, it may affect energy prices, cost structure of utility companies and relative prices, with a subsequent impact on inflation —if price rises are passed on to prices— or on fiscal balance —if subsidies are granted.

In conclusion, it is key for Argentina to restore the internal solvency of the public sector and the external solvency of all the economy to achieve certain medium-term economic balances. If, in the face of the first positive results, the efforts to reach such balances are abandoned, a new opportunity will be lost.

José María Segura
Chief Economist PwC Argentina

Tracking

A review of 2019 events and the future to come

2019 was expected to be difficult, after a 2018 struck by crisis and with an election ahead. However, what happened was much more negative and turbulent than expected.

Industry Roadmap

Impact of personal data protection regulations

Over the last decades, we have witnessed a technological revolution that has exponentially increased the pace at which businesses gather, store, process, assign and transfer personal data. This phenomenon triggered state action to protect data subjects, safeguarding certain fundamental rights: the right to information and to obtain access to or the rectification or erasure of personal data, among others.

Zooming

A thought on macroeconomics influence on microeconomics in Argentina

In the last 25 years, Argentina's GDP fell in 39 of the 100 quarters in that period. This means that the level of economic activity diminishes on average almost every two years. With this erratic behavior, the Argentine economy does not show a clear growth trend in the long term to make the necessary investments to sustain new companies' growth and development and increase aggregate productive capacity.

Global Coordinates

Looking for new opportunities in a changing market

As a consequence of the most recent technological revolution, markets face two key questions: what is driving the pace of digital change and how to be up to the situation. According to the eighth annual edition of the global report "2019 Digital Auto Report", developed by PwC Strategy&, the automotive industry faces a dilemma: profits no longer match the level of tech investment required.

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According to the Market Expectations Survey published by the BCRA in January 2019, Gross Domestic Product (GDP) was expected to drop 1.2% year-on-year by the end of 2019, with an exchange rate of 48 pesos per US dollar and high but declining inflation, finally reaching a year-on-year variation of 29% in December 2019 versus December 2018, and a primary fiscal deficit of ARS 5,580 million. However, the dynamics of the various events that took place during the current year led to a very different outcome.

2019

1

January

The first month of the year began with expectations and relative calm in financial variables. For a large part of the month, the exchange rate was below the non-intervention zone. The BCRA bought USD 560 million in foreign currency, thus increasing the target monetary base of this month by ARS 6.8 billion, which went from ARS 1.351 billion to ARS 1.358 billion. This liquidity injection associated with the purchase of foreign currency brought about a decrease in the LELIQs interest rates, which reached 53.7%. Such decrease translated into interest rates paid for term deposits.

As regards the international market, in a context of relative calm, the Federal Reserve did not raise interest rates. In addition, there was a fall in the risk premium due to certain tranquility regarding the trade conflicts between the United States and China, driving the return of international funds to emerging economies. This combination encouraged carry trades.

2

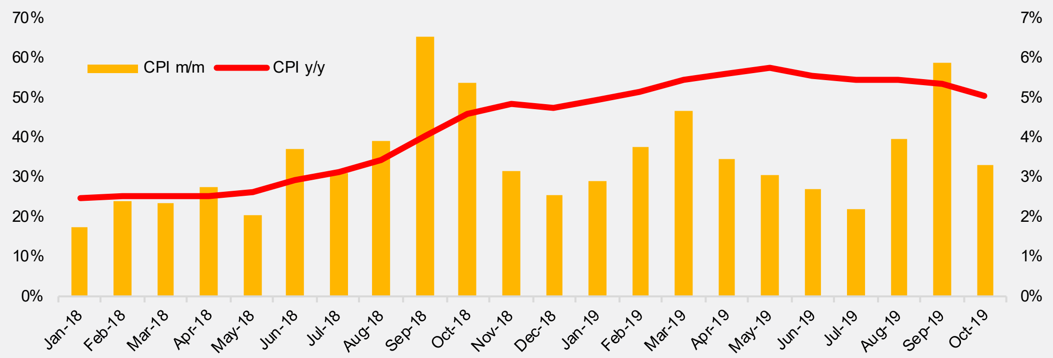
February

There were hikes in rates that were announced at the beginning of the year, which had an impact on prices. The most relevant increases were in electricity, transportation, prepaid health-care plans and fuels (oil).

Increases in food products and utility rates put pressure on the CPI, recording a 3.8% jump in inflation that would be revealed in March, resulting in an accumulated inflation of 6.8% in the first two months of the year and disruptions in the foreign exchange market.

GRAPHIC 1

Monthly and Year-on-Year Inflation



Source: Prepared by PwC Argentina based upon data obtained from the INDEC

3 March

While the BCRA allowed the decrease in the interest rate, agents perceived the price increase of February and March. Both events led to negative real rates, which generated a demand for dollars and reversed the carry trade of the first months of the year. In this context, the exchange rate began devaluing.

Meanwhile, the first quarter of the year closed with fiscal surplus —the first one since 2013— with income growing to 39.8% year-on-year compared to expenses reaching 30.9%, although both fell in real terms (inflation increased 51.8% during the same period).

4 April

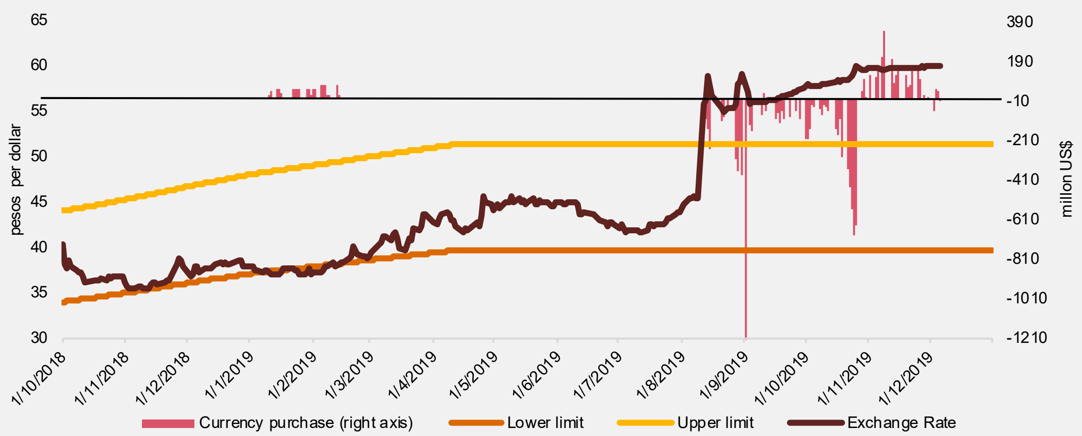
As a consequence of the exchange rate rise, which would have an impact on the high levels of inflation, the government announced a series of measures aimed at buffering the price increase, considering the influence of consumption —affected by the loss of purchasing power over the previous year— on the economic performance and the population sentiment in the face of a near election process.

The announcements were based on four pillars: prices and consumption, utility rates, social benefits and support to SMEs. With the purpose of controlling the price increase, the government agreed on a list of “essential prices” within the “price ceilings” program, in which the price of a basket of basic food products would be frozen for six months, at least. Further, in an attempt to contain the effect of the utility rate adjustments, the government announced a suspension of rate increases on electricity, gas and transportation at a national level, for the rest of the year, and on prepaid mobile phone services until September 15th.

In addition to these measures, the BCRA partially modified its monetary policy scheme aiming to reduce exchange rate volatility in the short term and, therefore, lower the expectations of a rise in inflation. So, the BCRA decided to set the non-intervention band between 39.75 and 51.45 pesos per US dollar until the end of the year and not to intervene in the exchange market in case the exchange rate fell below the lowest limit. However, given the impossibility to contain the exchange rate devaluation, the organism eased its monetary policy, which allowed the possibility to sell foreign currency, if necessary, even as the exchange rate remained within the non-intervention zone.

GRAPHIC 2

Exchange rate, non-intervention zones and purchases of foreign currency by the Central Bank of Argentina



Source: Prepared by PwC Argentina based upon data obtained from the INDEC

5

May

During this month, the Economic Monthly Activity Index (EMAE) had its first year-on-year increase after almost a year of decline. This advance was driven by the agriculture, livestock, hunting, and forestry sectors, whose year-on-year variation rose 50% mainly due to a comparative basis, since in 2018, the drought radically affected the main crops in the country. This sector would maintain its high growth during June and July.

Also, in May, Alberto Fernández and Cristina Kirchner declared their candidacy for president and vice-president, respectively.

6

June

The United States Federal Reserve kept its monetary policy interest rate unchanged but gave signs that it was possibly going to be reduced in the following months, something that actually happened in July. As a result, the currencies in the region showed a trend of appreciation in their values in May and June.

Two months after the economic measures' announcements, the exchange volatility reduced significantly. The suspension of rate adjustments and the exchange market tranquility led to a slowdown in the monthly inflation, which hit 2.7% in June, after the peak of 4.7% in March.

It was decided that Miguel Ángel Pichetto was going to be Macri's running-mate.

7

July

One month before the PASO elections, the uncertainty continued an upward trend, backed by a fragile stability of financial variables, with an inflation that seemed to be edging down and a stagnant economy.

Public accounts showed primary surplus again in the second quarter of the year, while the BCRA decided to ease the monetary base target in the July-August period (as these are months of higher demand for pesos) with the promise to tighten it in the following two-month period. The monetary authority also reduced to 58% the rate floor for LELIQs, in line with the slowdown in inflation during May and June but remaining within the positive real interest rates.

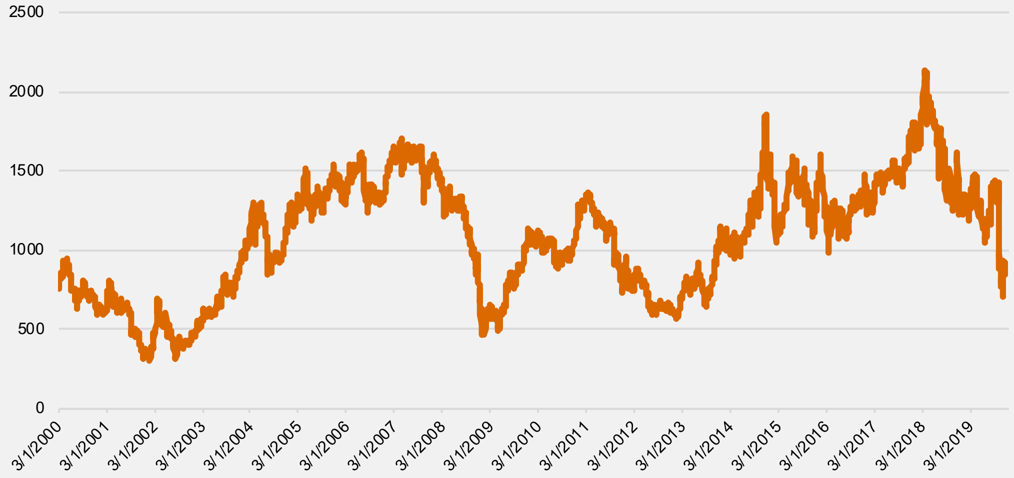
8

August

In August, the primary elections took place and its official results showed a difference in favor of the opposing candidate, which was much wider than that originally expected. This unexpected victory had an impact on Argentina's fragile macroeconomic balances. In a single day, the peso devalued by 22.7%, the S&P Merval index in pesos dropped 37.93% and the country risk grew from 872 basis points to 1,467 basis points.

GRAPHIC 3

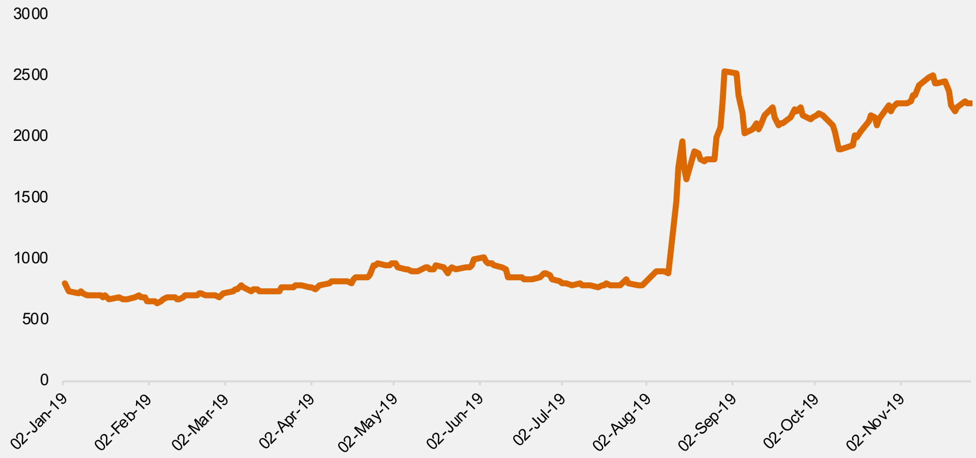
S&P Merval index in pesos in real terms (2000-2019)



Source: Prepared by PwC Argentina based upon data obtained from the INDEC and Reuters

GRAPHIC 4

Country Risk



Source: Prepared by PwC Argentina based on financial information sources

The post-PASO scenario would give way to political uncertainty and a continuous devaluation of the peso, with its subsequent impact on the inflation rate that had been experiencing a slowdown until then.

In this adverse context, the government undertook short-term measures aiming to reduce exchange rate volatility, control price rises and, at the same time, improve the citizens' available income to limit the drop in consumption.

9

September

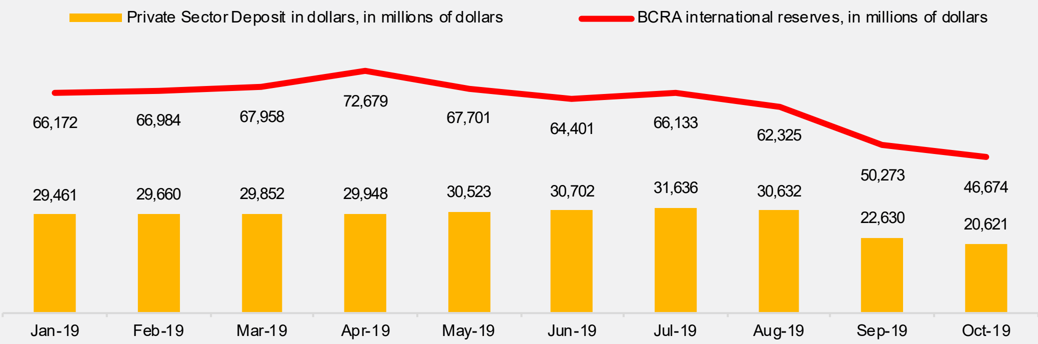
In the three weeks after the primary elections, the exchange rate continued devaluing and the country risk rose. Political uncertainty remained and forced the government to establish foreign exchange[1] controls to stop the outflow of reserves from the BCRA, which dropped USD 11,636 million between August 12 and 30 due to the acceleration of withdrawals of private sector deposits denominated in dollars.

The consequences of the restrictions, which eliminated large part of the demand for dollars, mainly from legal entities, were immediate. The exchange rate appreciated by 3% and was stabilized at values around 56 pesos per US dollar in the wholesale market and below 60 in the retail market.

The strong devaluation of the peso in August passed through to retail prices in September, generating the highest peak in the first eight months of the year. The CPI grew 5.9%, thus reversing the slowdown of the last months.

GRAPHIC 5

BCRA reserves and private sector deposits, in millions of dollars



Source: Prepared by the authors based on Central Bank of Argentina official statistics.

10

October

A new President was elected for the 2019-2023 period as a result of the elections held on October 27th. Against this backdrop, and in the wake of the high demand for dollars of the retail private sector, foreign exchange controls were heavily tightened, preventing individuals from buying more than USD 200 per month through home banking and USD 100 in cash. This limitation would allow people to buy dollars from the BCRA deriving from the trade surplus on the following month, which was positive during the whole year and intensified in September and October.

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[1] Decree No. 609/2019 and BCRA Communication "A" 6770 - Income

11

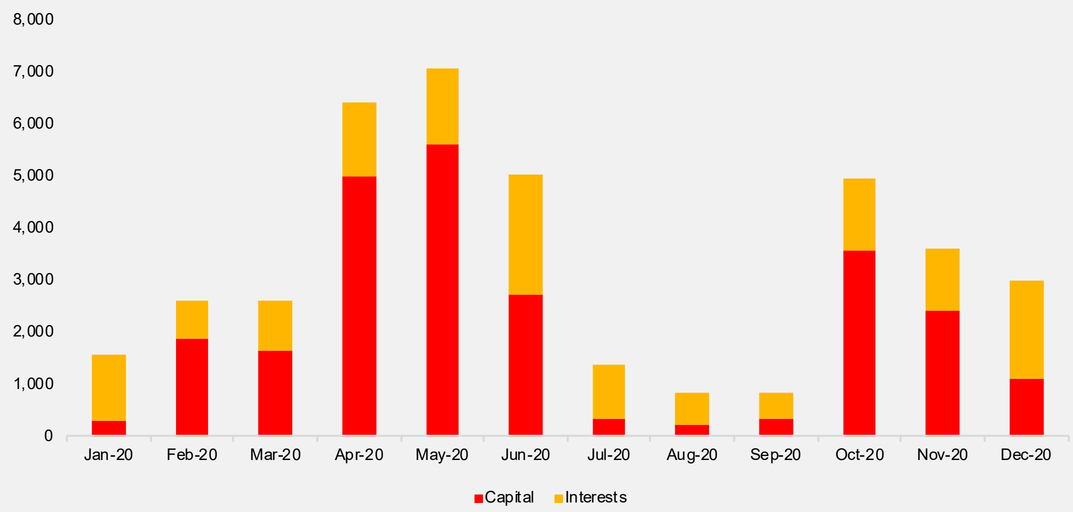
November

One of the most debated issues during this month was public debt. As the short-term debt maturity scheme confronting the country is complex, there is no access to financial markets, no possibility of rolling over and there is a very small expected fiscal surplus to pay the debt.

According to the last information available, during the first quarter of next year, there will be payments for 4% of GDP, while in the second quarter, they will grow to 6%. As the status of Treasury funds do not allow to make those payments, it is imperative that the new administration manages to restructure the debt to save the country from going into default and complicating even more its financial situation and that of the businesses affected by sovereign risk.

GRAPHIC 6

BCRA reserves and private sector deposits, in millions of dollars*



Source: Prepared by PwC Argentina based on statistics from the Ministry of Finance
*Valued at the exchange rate at 09/30/2019 It does not include BCRA temporary advances and Treasury Bills

12

December

On the 10th, presidential transition took place and the new government took office. One week after the change of administration, a Solidarity and Productive Recovery Bill was sent to the Congress, declaring the economic emergency and granting extraordinary attributes to the Executive Branch. Further, its central pillar is too close the primary fiscal gap, by increasing tax burden, particularly in the agro-exporting sector and the middle class. In addition, a 30% tax on the purchase of dollars was imposed (on trips, purchases abroad or savings), which may imply a virtual splitting of the foreign exchange market. As for public spending, the government established a 180-day suspension of the Argentine Integrated Pension System Law and gave retirees two bonds of 5,000 pesos for minimum pension payments in December and January, which represents a saving for the public sector.

At the closing of this edition, it still remains unknown how the debt restructuring process will be, which needs to be solved soon. The monetary policy to be determined by the BCRA to curb inflation will also be of high importance.

[2] GDP in dollars estimated by the IMF for 2020 (WEO, October 2019).

Industry Roadmap

Impact of personal data protection regulations

Pedro De La Fuente

Over the last decades, we have witnessed a technological revolution that has exponentially increased the pace at which businesses gather, store, process, assign and transfer personal data. This phenomenon triggered state action to protect data subjects, safeguarding certain fundamental rights: the right to information and to obtain access to or the rectification or erasure of personal data, among others.

In Argentina, a personal data protection system was established, whereby businesses, among others, were under the obligation to register certain files and/or bases and to take measures regarding their use in order to avoid legal actions by data subjects. Activities associated with data files and/or bases including personal information are currently governed by Personal Data Protection Law No. 25326, regulatory decree No. 1558/2001 and other regulations issued by the Agency for Access to Public Information. This set of rules awards data subjects the possibility of controlling the use of their personal data.

Current regulations aim to guarantee full protection of personal data kept at files, records, bases, or other technical processing means, either public or private, for purposes which exceed or may exceed mere personal use.

As a general principle, under current regulations, the processing of personal data is only allowed when data subjects consent to it. And for such consent to be valid, it must be free, express, and informed.

Consent is not required when data are obtained from unrestricted sources or when, due to their nature, they do not merit special protection.

Our laws protect "sensitive data", which are data revealing racial and ethnic origin; political opinions; religious, philosophical or moral beliefs; trade union membership; and data concerning a natural person's health or sex life. Accordingly, except for reasons of public interest, it is legally prohibited to compel a person to provide sensitive data, and to create files, bases or records storing information directly or indirectly revealing sensitive data.

Regarding transfers to third parties, regional regulations set out a series of guidelines: (i) data may only be transferred for the purposes of the legitimate interests pursued by the transferor and the transferee; (ii) the prior consent of the data subject, who shall be previously informed of the purpose of the transfer, is required, and the transferee of the data shall be identified or capable of identification. However, our laws provide for some exceptions to this rule, for instance, when the transfer involves identification data only, or when it is necessary for the development or compliance of a preexisting contractual relationship with the data subject.

The impact of regulations on the international transfer of personal data is a common concern for businesses.

In principle, the law prohibits the transfer of personal data to any type of countries or international or supranational bodies that do not ensure appropriate data protection.

In 2016, Argentina prepared a list of countries deemed to have appropriate data protection laws, which includes the member states of the European Union and of the European Economic Area, Switzerland, Guernsey, Jersey, Isle of Man, Faroe Islands, Canada - only its private sector —Andorra, New Zealand, Uruguay, and Israel.

The list is updated by the Agency for Access to Public Information based on certain guidelines set out by the applicable regulations.

Consequently, the question arises as to how to circumvent the prohibition of transferring personal data to jurisdictions that do not provide adequate levels of protection in accordance with Law 25326, such as the United States of America, among others.

Considering that the regulations in force in Argentina are based on the consent of the data subject, a first solution would be to obtain such consent.

Another solution is to draft and implement master agreements setting out standard terms approved by the enforcement authorities to facilitate protection.

A third solution, only for international transfers within entities of a same economic group, would be the recognition of the self-regulation system embodied in binding corporate standards.

In conclusion, we have offered a brief overview of the most relevant impacts of personal data regulations upon businesses, such as the consent necessary for data processing, the restrictions on transfers to third parties and the requirements for international transfers.

It is worth noting that regulation in this area is constantly changing and impacted by the extraterritorial application of other set of rules, such as the European Union General Data Protection Regulation, or the General Law on the Protection of Personal Data of the Federative Republic of Brazil. Should you have any additional questions on this matter, our PwC Argentina Legal Services team is always available to help you.

Zooming

A thought on macroeconomics influence on microeconomics in Argentina

In the last 25 years, Argentina's GDP fell in 39 of the 100 quarters in that period. This means that the level of economic activity diminishes on average almost every two years. With this erratic behavior, the Argentine economy does not show a clear growth trend in the long term to make the necessary investments to sustain new companies' growth and development and increase aggregate productive capacity.

The simple growth average in the last 25 years shows an annual increase of 2.2%, with a very high volatility. Thus, in the years from 1994 to 1998, the convertibility fastest growing period, GDP showed a quarterly growth of 4.1% on average; and then fell up to 2.8% on average from 1999 to 2001, under the same currency convertibility system. In the period from 2003 and 2008, after the crisis that put an end to the exchange rate peg, there was a rapid recovery in a favorable international context, with an annual average growth rate of 8%. This improvement ended abruptly with the outbreak of the global financial crisis and certain events that occurred at a national level. Subsequently, since 2011, the Argentine economy has grown only 0.6% on average, alternating with lower and higher levels of economic activity in the event and odd years (election years), except for 2019, when economic activity declined again.

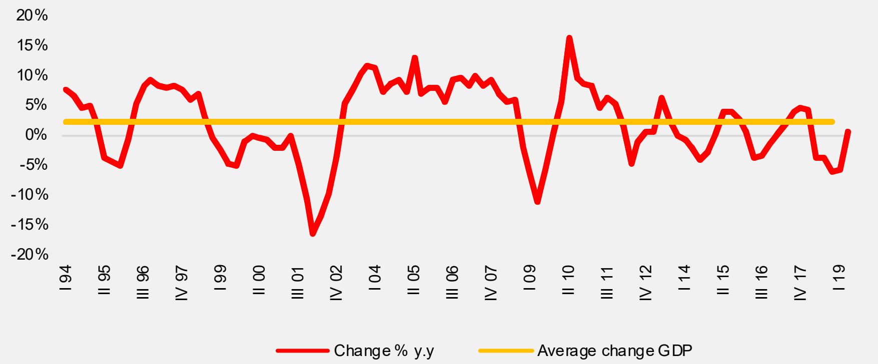
[1] In other words, the nominal exchange rate adjusted by relative inflation in both countries.

Furthermore, in the last 25 years, the bilateral real exchange rate with the USA[1], which somehow shows the competitive prices in the economy and the capacity to import goods and services, has also been highly volatile, without striking a long-term balance.

Only in 15 of that 300-month period, the real exchange rate was below the 5% average. If a 10% difference is considered, the real exchange rate approximates to its average in just 36 months.

GRAPHIC 1

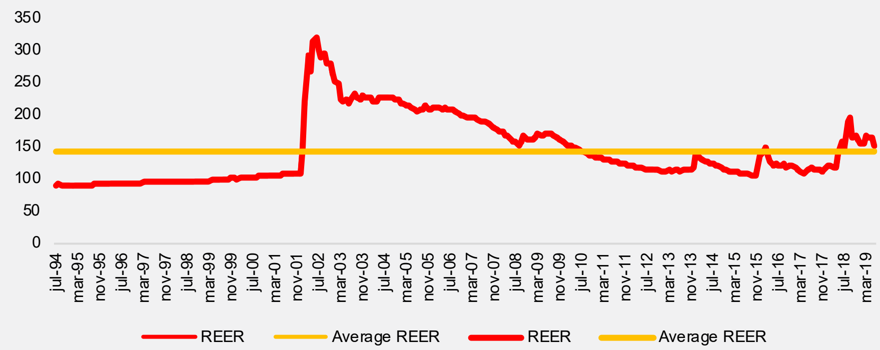
Year-on-year percentage variation in GDP at constant prices



Source: Prepared by PwC Argentina based on INDEC statistics.

GRAOHIC 2

Bilateral real exchange rate index December 1999=100.



Source: Prepared by PwC Argentina based on statistics from Bureau of Labor Statistics, BCRA, INDEC and "IPC Congreso".

It simply means that the Argentine economy has not shown a sustainable growth, with a relatively stable purchasing power for its production. The Argentine economy went from boom to bust in the last decades.

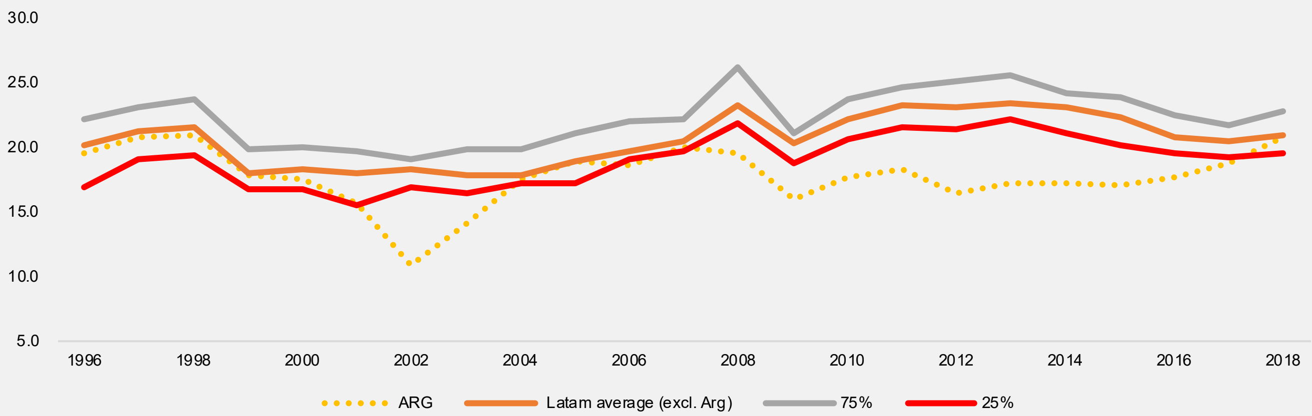
In this highly volatile macroeconomic environment that persists over time, the Argentine companies must make production, provision of services and investment decisions.

In view of the great uncertainty about medium-term production levels, it is difficult for companies to foresee investments in the long term.

In the last 25 years, Argentina applied an aggregate percentage of resources to the gross capital formation (which can be interpreted as an investment) systematically lower than the average of the countries in the region, excluding Venezuela. Furthermore, if a dispersion measure is considered, this indicator for Argentina has been below 25 percent in most of the years, as compared to other countries in the region. In brief, the Argentine economy resolves the dilemma about present consumption/future consumption (investment) in favor of the former.

GRÁFICO 3

Gross capital formation (% of GDP) Argentina and Latin American countries[2]

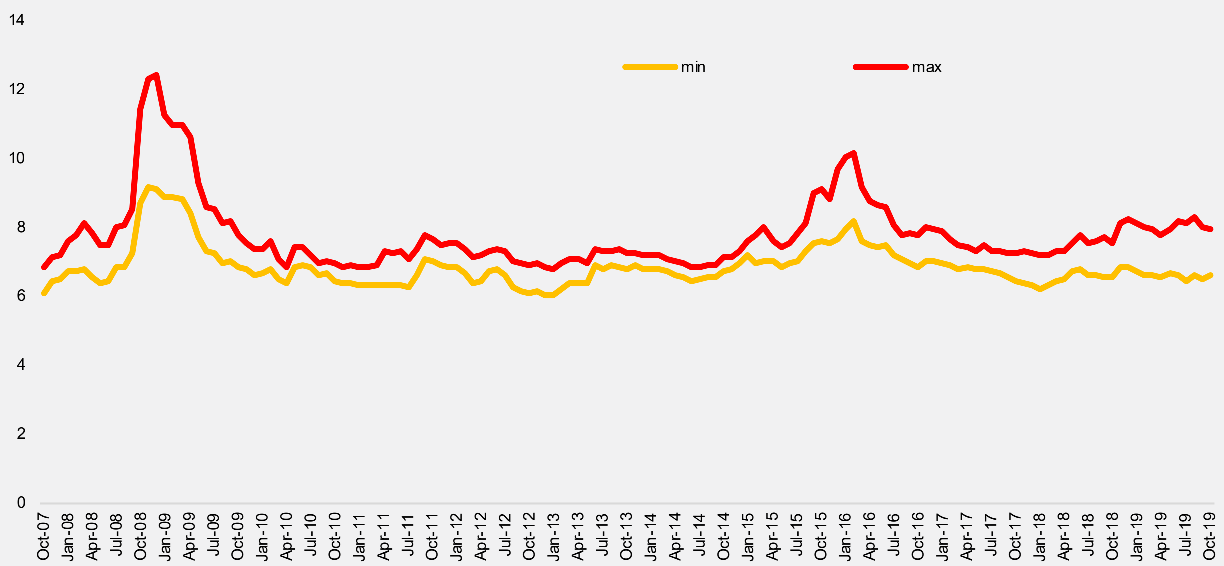


Source: Prepared by PwC Argentina based on World Bank's World Development Indicators.

[2] Includes Bolivia, Brazil, Chile, Colombia, Ecuador, Peru, Paraguay and Uruguay

GRAPHIC 4

Argentina's average maximum and minimum Country Risk Premium, as compared with other countries in the region[3].



Source: Prepared by PwC Argentina based on financial information sources.

Another reason why Argentina has been following this direction is its weak financial system for financing investments. The level of credit over GDP did not exceed 20% in the last 25 years, while the other countries in the region have significantly surpassed this percentage.

In addition, access to long-term financing, especially by small enterprises, has been very difficult, in view of the high interest rates and the small amount of money available, which in general does not meet the needs. Thus, many companies end up financing their investments with their own resources, depending on the results of their operations. In this regard, if the EMBI+ indicator is considered as a measurement of the opportunity cost to invest in Argentina, as compared with other countries in the region, we can see that Argentina's country risk premium is above that of other countries, even if the jumps in its value are not taken into account. This average surcharge reduces the possibility of selecting less profitable projects and centers decisions on those projects with a lower probability of repayment and higher expected profit margins.

Demand for long-term investment and the creation and growth of companies, that is, the supply-side economics, have been difficult in this context.

Thus, it is also noteworthy that the total number of companies in Argentina has varied throughout the years, reflecting at a microeconomic level Argentina's macroeconomic volatility. In the 25-year period under analysis, we can see periods of increasing numbers of companies, followed by periods of decreasing numbers.

The fact that some businesses are closed and others are started is a defining characteristic of the capitalist economic system, and we cannot expect otherwise.

In different moments and under different circumstances, less efficient companies are replaced by those that implement new production or organization technologies, which makes them more efficient to face competitors. In other cases, disruptive changes may lead to a sudden boom in start-ups in different specific sectors, such as the so-called dot-com companies by the end of the 1990s, which also contributes to the closure of a large number of companies until that sector matures.

[3] Excludes Venezuela. The selected methodology consisted in taking Argentina's EMBI+, without considering a standard deviation, and in determining the difference with the EMBI+ of each of the neighboring countries considered. Subsequently, an average spread for each country was obtained. The value plotted on the graph represents the minimum and maximum premiums for each month.

In a relatively stable economy, a natural or gradual growth in the number of companies, aligned with the long-term economic trend, would be expected, especially in the most mature sectors or sectors with known technologies.

A more sustainable development of companies' life cycles also allows for more profound interrelationships between the different upstream and downstream supply chains and develop new capabilities.

This does not seem to occur in Argentina. Statistics for companies by sector show that, since 1996, the total number of companies has fluctuated throughout the years, especially in the industrial, construction and the natural resources sectors, mainly the agricultural and livestock business.

This year-on-year variation may be attributable to multiple factors and circumstances. However, there is a significant correlation between these microeconomic fluctuations and the macroeconomic variables analyzed earlier. The number of companies operating in the natural resources sectors in particular tends to change in line with the fluctuations in the real exchange rate and GDP; while the number of companies in the rest of the sectors tends to change in line with GDP.

Volatility in Argentina for over 20 years has not encouraged long-term growth for the economic agents, especially firms, to be able to plan for the future.

Stabilization of the economic cycle has become a top priority from a macroeconomic standpoint.

TABLE 1

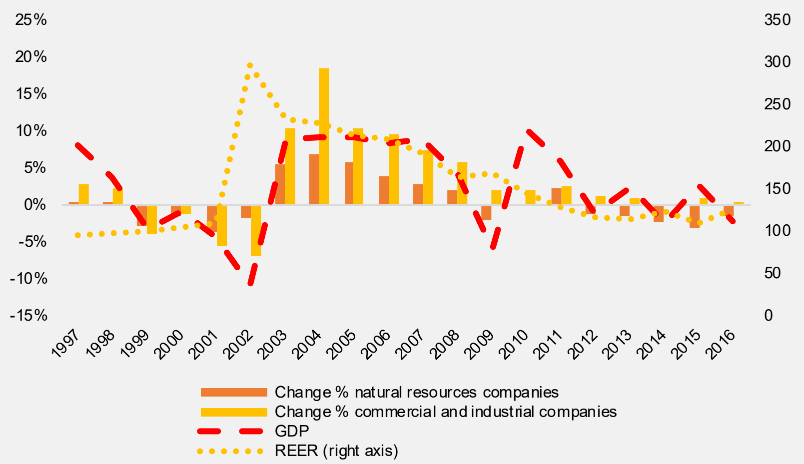
Number of companies per year and per sector.

YEAR	NATURAL RESOURCES SECTORS	INDUSTRIAL	CONSTRUCTION
1996	58.772	49.001	12.525
1997	59.030	49.351	13.439
1998	59.115	49.412	14.496
1999	57.417	47.050	14.339
2000	56.545	45.316	14.038
2001	54.514	42.407	12.308
2002	53.512	39.686	10.493
2003	56.514	43.200	12.409
2004	60.391	48.096	15.077
2005	63.817	51.376	17.936
2006	66.320	54.818	20.673
2007	68.147	57.211	23.001
2008	69.467	58.770	24.466
2009	67.979	58.703	24.030
2010	67.828	58.618	24.753
2011	69.441	59.217	26.049
2012	68.595	59.128	26.008
2013	67.518	59.032	26.275
2014	65.934	58.718	26.311
2015	63.915	58.864	26.248
2016	62.962	58.030	25.867

Source: Prepared by PwC Argentina based on information from the Modernization Secretariat of the Nation.

GRÁFICO 5

Annual variation in the total number of companies in the Natural Resources, Industrial and Commercial sectors



Source: Prepared by PwC Argentina based on information from the Ministry of Finance and the Modernization Secretariat of the Nation.

Global Coordinates

Looking for new opportunities in a changing market

As a consequence of the most recent technological revolution, markets face two key questions: what is driving the pace of digital change and how to be up to the situation. According to the eighth annual edition of the global report “2019 Digital Auto Report”, developed by PwC Strategy&, the automotive industry faces a dilemma: profits no longer match the level of tech investment required.

The report focuses on the United States, Europe and China. This is a quantitative outlook based on a detailed research of automotive industry that includes interviews with industry executives, providers and manufacturers of original equipment.

The findings reveal that, despite important tech innovation in auto connected services, the auto industry’s profits are still low.

The total number of cars in use in Europe is forecasted to peak at 273 million in 2025 to decline thereafter. It is estimated that the number will continue to increase in China and at a slower pace in the United States. Besides, mobility spending is expected to go up to USD 1.2 trillion in Europe, the United States and China by 2030, accounting for an annual growth of 20%. Likewise, the costs of the materials to produce cars in line with booming technology (such as electric power transmissions and automated features) are expected to increase between 20% and 40% by 2030.

By 2030, the traditional car sales, part sales and aftersales are estimated to shrink from 70% to 55% of total automotive market, while non-traditional player share profit may raise between 5% and 25%.

In the face of this changing and transforming scenario, as a consequence of technological advances and demand, alternative ownership models are needed to ensure car users affordability and new revenue opportunities for auto part providers and for the automotive industry.

In this regard and considering the original question of which measures should be taken by car providers and manufacturers to remain competitive, PwC Strategy& suggests that big efforts are needed to reduce technology costs in the coming decade. They will need strategies to reduce their Research and Development (R&D) costs through partnerships to focus on developing new ideas while outsourcing back-office, R&D and technology solutions.

Figure 1 shows an example of technology improvement in vehicles' connectivity and how it is projected for the coming decade in Europe, China and the U.S.

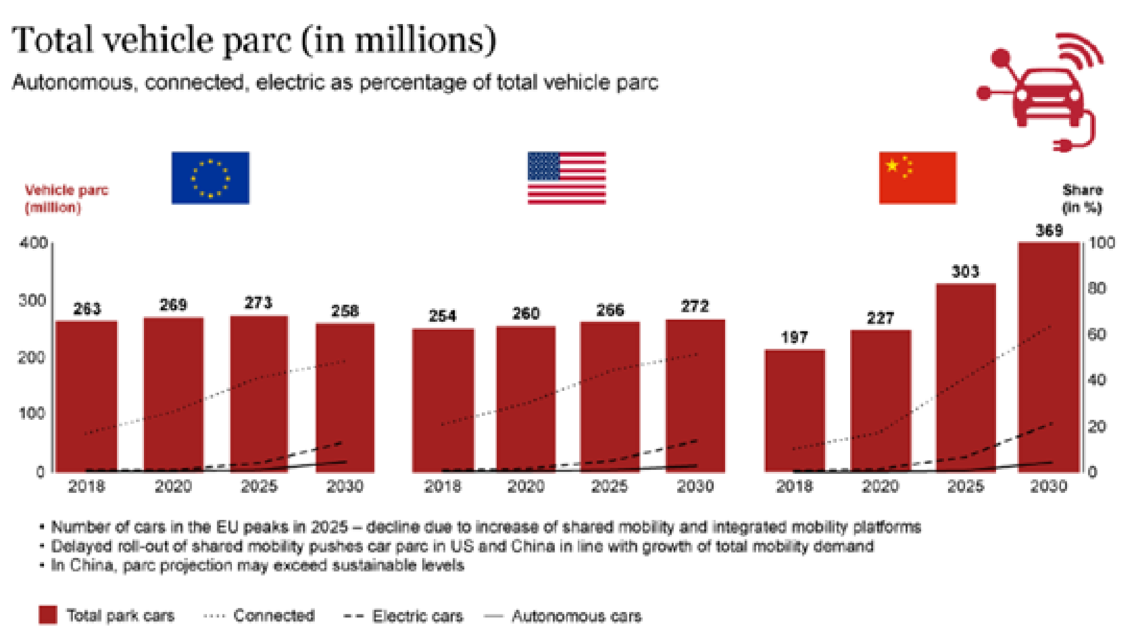
It is estimated that new sustainable roles will emerge for suppliers: smart infrastructure enablers, automated vehicle manufacturers, platform providers and mobility intelligence providers.

The technologies projected available between 2018 and 2030 for China, Europe and the U.S. are: Connected cars: sales of 5G enabled vehicles are expected to reach 16 million in the EU, U.S. and China by 2030. Autonomous cars: they are estimated to operate in restricted areas at less than 50km/h by 2021. Electric cars: by 2030, 46% of new car registrations in China will be for electric cars, while in Europe this figure will be 40% and in the U.S., 35%. Shared cars: PwC report shows that more than 50% of consumers would be willing to pay up to USD 250 for a monthly subscription for unlimited rides within the city, while 47% of European consumers would consider giving up their own car for an easily available vehicle, such as adequately priced autonomous robotaxi services.

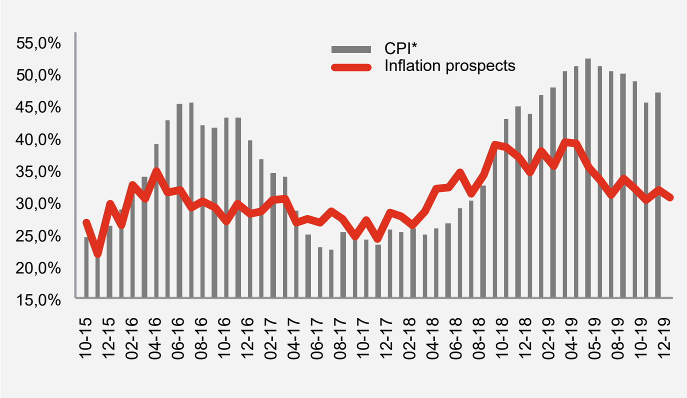
To conclude, considering the second question made at the beginning about what is driving the pace of digital change, the PwC report indicates that the factors that will determine the speed of industry transformation are technical readiness, consumer demand, regulations imposed by the market and the economy itself.

Likewise, more flexible and hybrid organizations must be created to face changes in the coming decade and, due to the scarcity of people with the right skills to face these challenges, the automotive industry must upskill its existing workforce so that digital and data-management roles may be performed.

FIGURE 1

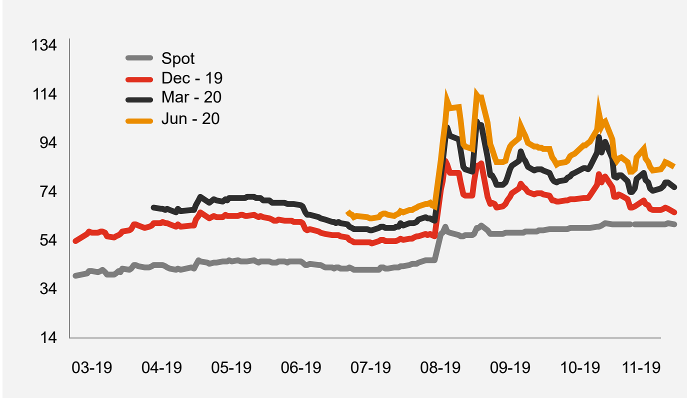


Inflation



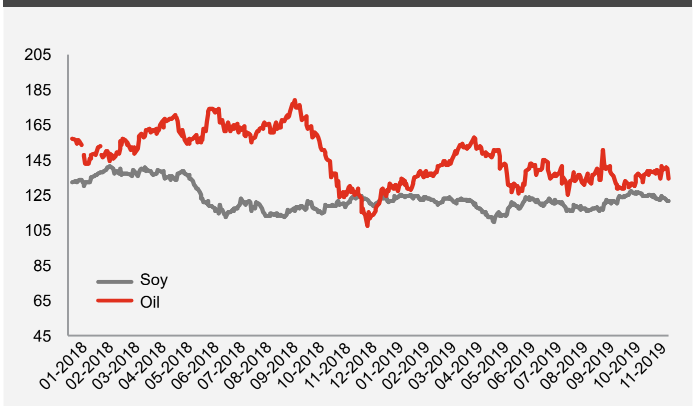
Source: Own calculations based on CPI Congress and UTD
*CPI Congress. As of November 2016 it is considered CPI City of Buenos Aires

Exchange rate: spot and futures



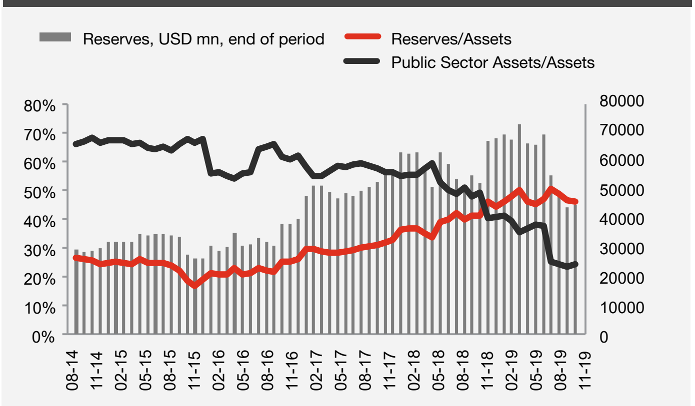
Source: Own calculations based on Rofex

Price of Soy and Oil, index2004=100



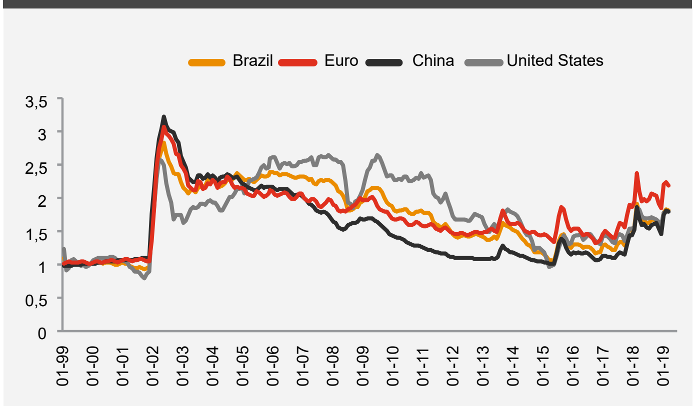
Source: own calculations based on CBOT y WTI NYMEX

Reserves and Central Bank Assets



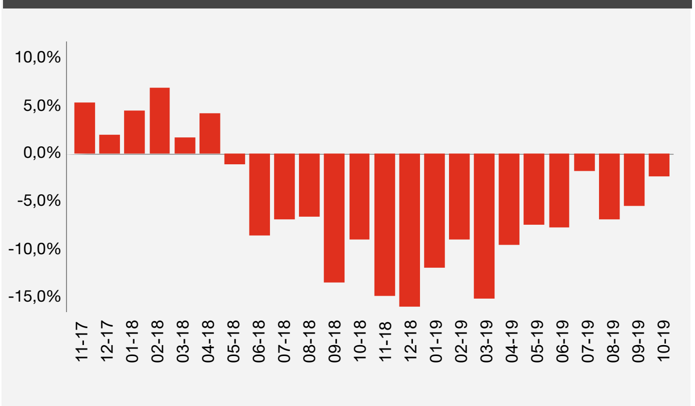
Source: own calculations based on Central Bank of Argentina

Real Exchange Rate Index: base Dec-99=1



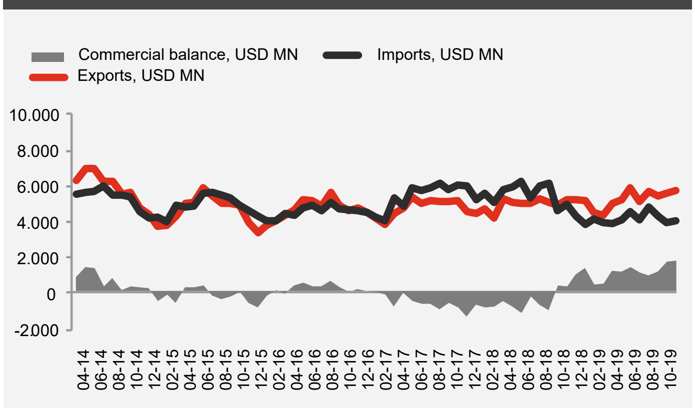
Source: own calculations based on the Central Bank of Argentina

Monthly Industrial Estimator



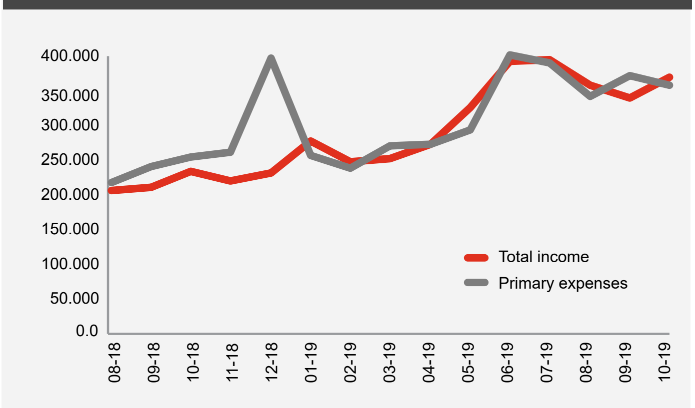
Source: own calculations based on INDEC

Foreign Trade



Source: own calculations based on INDEC

Income and Expenses of the National Non-Financial Public Sector



Source: own calculations based on Secretary of Finance

Activity and Prices	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Real GDP, var % y/y	-1.8%	2.7%	-2.5%	-	-1.7%	-	-
CPI Federal Capital, var % y/y	41.0%	26.1%	45.5%	52.2%	50.8%	47.2%	49.0%
CPI San Luis, var % y/y	31.4%	24.3%	50.0%	57.1%	54.8%	51.5%	53.4%
Industrial Production, var % y/y	nd	2.5%	-5.0%	-6.4%	-5.1%	-2.2%	nd
International Reserves (end period, USD mn)	39,308	55,055	65,806	54,100	48,703	43,260	43,772
Import Cover (month of reserves)	8.44	9.87	12.07	12.30	12.17	10.50	nd
Implicit exchange rate (M0 / Reserves)	20.81	18.34	21.41	23.96	26.90	32.07	38.19
$/USD, end period	15.85	18.77	37.81	59.08	57.56	59.73	59.86

External Sector	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Exports, USD mn	57,879	58,622	61,620	5,568	5,746	5,889	nd
Imports, USD mn	55,911	66,930	65,443	4,400	4,002	4,121	nd
Comercial Balance, USD mn	1,969	-8,308	-3,823	1,168	1,744	1,768	nd
Currency liquidation by grain exporters, USD mn	23,910	21,399	20,202	2,266	2,094	1,978	2,186

Labor*	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Unemployment, country (%)	7.6	7.2	9.1	-	9.7	-	-
Unemployment, Greater Buenos Aires (%)	8.5	8.4	10.5	-	11.1	-	-
Activity rate(%)	45.3	46.4	46.5	-	47.2	-	-

Fiscal	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Income, $mn	2,070,154	2,578,609	3,382,644	458,495	422,012	446,172	474,870
VAT, $mn	583,217	765,336	1,104,580	141,395	139,170	146,251	142,642
Income tax, $mn	432,907	555,023	742,052	102,677	83,699	79,941	88,621
Social Security System, $mn	536,180	704,177	878,379	97,519	88,169	94,966	105,994
Export Tax, $mn	71,509	66,121	114,160	39,384	32,148	38,791	53,764
Primary expenses, $mn	1,790,789	2,194,291	2,729,251	308,680	329,076	327,013	nd
Primary result, $mn	-343,526	-404,142	-338,987	13,746	-25,368	8,527	nd
Primary result, $mn	185,253	308,048	513,872	30,288	69,973	86,792	nd
Fiscal results, $mn	-474,786	-629,050	-727,927	-14,798	-76,224	-64,247	nd

Financial - interest rates***	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Badlar - Privates (%)	20.04	23.18	48.57	55.17	59.85	54.88	46.19
Term deposits $ (30-59d Private banks) (%)	19.51	21.80	46.22	52.86	57.72	53.71	44.89
Mortgages (%)	19.70	18.61	47.70	48.54	51.85	53.16	44.83
Pledge (%)	20.82	17.42	24.88	26.78	30.27	30.67	33.24
Credit Cards (%)	44.45	42.21	61.11	70.53	70.43	72.16	76.29

Commodities****	2016	2017	2018	Aug-19	Sep-19	Oct-19	Nov-19
Soy (USD/Tn)	362.6	358.9	342.3	314.6	322.4	339.9	333.0
Corn (USD/Tn)	141.1	141.4	145.0	148.1	142.6	153.4	147.1
Wheat (USD/Tn)	160.3	160.2	182.1	174.7	176.0	186.7	189.6
Oil (USD/Barrel)	43.3	50.9	64.9	54.8	57.0	54.0	57.1

* 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, Ministy of Economy, BCRA, AFIP, Unión por Todos, CIARA, CBOT, NYMEX

Our services

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

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