

CFA Institute Research Challenge

Hosted by
CFA Society
Argentina & Uruguay



Figure 1

Market data	
Closing Price (USD)	10.2
52 wk High / Low	26.89 / 6.36
Avg. 3M daily volume (MM)	0.68
Shares Outstanding (MM)	119.21
Market cap (USD MM)	1,218.3
Enterprise value (USD MM)	1,378.9
Beta (5Y weekly)	1.1
P/E (LTM)	25.3x
EV/EBITDA (LTM)	10.9x
EV/Installed capacity (tn)	151.5x

Figure 2

Source: Thomson Reuters

Valuati	Valuation results							
Valuation date	11/1	/2018						
Methodology	weight	Price						
FCFF	75%	8.0						
EV/EBITDA 2019F	25%	9.1						
12-Month Target price		8.3						
Cost of Capital (WACC)		11.6%						
Cost of Equity		14.9%						
Premium/Discounted (%)		-18.9%						
Dividend Yield		1.1%						

Source: Thomson Reuters and Team estimates

Figure 3

Recent news
Loma Negra y Ferrosur iniciaron la décima edición del Día de Hacer el Bien
Se conocieron los detalles de la demanda contra Loma Negra
Juicio a Loma Negra en Nueva York por ignorar futuro económico local

Source: Thomson Reuters

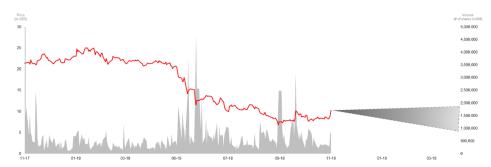
Valuation Date: 11/1/2018 Current Price: 10.2 Ticker: LOMA Recommendation: SELL Target Price: 8.3 Downside: 18.9%

Stock Exchange: NYSE
Sector: Construction Materials

Industry: Cement

Company profile. Loma Negra Compañía Industrial S.A. ("LOMA" or the "Company") is the market leader in the Argentine cement industry. They produce and distribute cement, aggregates, concrete and lime to wholesale distributors, producers and industrial customers.

Investment Recommendation. We issue a **SELL** recommendation with a one-year target price of USD 8.3 per share, representing 18.9% downside from its November 1st 2018 closing price of USD 10.2. The methodology used for out valuation was based on 25/75 mix of EV/EBITDA 2018E multiple analysis and the Free Cash Flow to the Firm model.



Valuation drivers

Macroeconomic outlook. On October 26, 2018 the International Monetary Fund ("IMF") executive board approved a USD 57 Bn loan package for Argentina to help stabilize the country's economy. In order to accomplish with the terms and conditions of this renewed agreement and to attain primary fiscal balance, Argentina is introducing hugely austerity measures, including large cuts in transportation, public works, health, education and science budgets. These measures added to a macroeconomic scenario with high inflation and high interest rates will impact directly in the country's growth perspectives and therefore in the cement industry, too.

Slowdown of current Administration's infrastructure plan. Since taking office in December 2015, the Government has ramped up investment in infrastructure after more than a decade of underinvestment. Now the country has to achieve its deficit goal to recover investors' confidence, so the economy is going to slow down and with that the aggressive infrastructure plan, upon which LOMA would have been benefited, will be postpone.

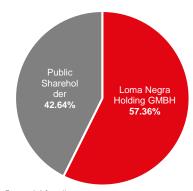
High volatility due to political risks. Argentina's shaky economic conditions will likely have an impact on general elections scheduled for October 2019. And in the meantime, while the economy is expected to bounce back before then, there is no assurance that ordinary people will feel its benefits and decide to vote for the sitting government of President Mauricio Macri. Indeed, public sentiment may worsen between now and then.

"Argentina's Lava Jato" corruption case. The so-called bribery notebooks scandal was revealed in August this year and since then it has already led to investigations of dozens of politicians and businessmen, mainly from the construction industry. It might be the largest corruption case and a turning point for Argentina's history... but it will also have immediate negative implications for many Argentine companies, as well as jeopardising planned investments that would boost growth.

Pollution and cement industry. Cement and concrete industry are heavily dependent on the production of clinker as key ingredient for cement production. The calcination and combustion processes required for this clinker production releases a substantial amount of CO2. Some companies are using partial substitutes of clinker in cement production and partial substitutes of cement in concrete production to reduce these CO2 emissions, especially if those materials used are seen as a waste of other processes, such as the Fly-ash. This material and other materials could start to be used as cement or concrete additions in Argentina in order to reduce the pollution generated by the cement and concrete sector.

	Financial data											
	2017	2018E	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	
Revenue	922.735	684775,341	598699,3254	672790,6285	767218,1478	867328,1503	934821,3544	10 19 0 16,69 1	1116667,332	1154381,255	1204766,918	
Revenue growth		-26%	-13%	12%	14%	13%	8%	9%	10%	3%	4%	
EBITDA	228114,2761	148718,7911	114098,6393	133501,1369	162539,4996	205226,8696	231379,0804	262954,9983	300160,44	307462,7506	320343,4408	
EBITDA margin	25%	22%	19%	20%	21%	24%	25%	26%	27%	27%	27%	
ROE	44%	27%	35%	33%	37%	43%	42%	41%	40%	36%	32%	
Net Debt/EBITD/	28%	22%	100%	105%	90%	46%	16%	-10%	-31%	-51%	-69%	

Figure 4 - Shareholder Structure



Source: Company's Information

Figure 5

List of Board of Directors
Franklin Feder
Sergio Damian Faifman
Pablo Nigro
Pablo Diriz
Carlos Boero Hughes
Diana Mondino
Sergio Daniel Alonso

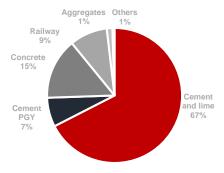
Source: Company's Information

Figure 6

List of Executive Officers							
Sergio Damian Faifman	CEO						
Marcos Isabelino Gardin	CFO						
Eduardo Blake	Logistics Procurement & Supply Chain Director						
Ariel Damiano	Industrial Director						
Gerardo Oscar Diez	Commercial & Concrete Director						
Damian Ariel Caniglia	Human Resources Director						
Matias Cardarelli	Yguazú Cementos General Director						
Gustavo Daniel Romera	Ferrosur Roca General Director						
Lucrecia Loureiro	General Counsel						

Source: Company's Information

Figure 7 - Revenue by business unit



Source: Financial Statements

Figure 8 - Ferrosur's railway Map



Company Overview

General description of the Company. Founded in 1926 by Alfredo Fortabat, LOMA with 9.1 million to of installed capacity is the leading company in the Argentine cement industry. The Company, together with its subsidiaries, manufactures and distributes cement, masonry cement, aggregates, concrete and lime in Argentina and Paraguay. LOMA is one of the most widely recognized companies in Argentine due to its over 90 years of experience. In 2005 LOMA became part of InterCement Group ("Intercement"), one of the most relevant players in the construction material industry in the world. The Company launched an Initial Public Offering ("IPO") in October 2017, being the largest IPO of an Argentine company since YPF S.A.

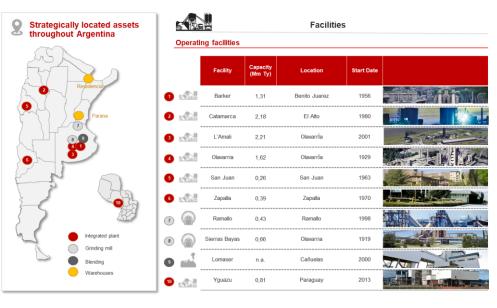
Shareholder Structure. In 2017 Loma launched an Initial public offering ("IPO") at the price of USD 19 per American depository share, racing about USD 954 Million. It was the largest IPO by an Argentine company since YPF rise USD 2,7 billion in 1993. Prior to this IPO Loma Negra holding GMBH, controlled by Brazilian cement conglomerate Intercement which now owns 57,36% of Loma. Intercement is the business unit of Camargo Correa group, one of the largest Brazilian private conglomerates, founded in 1939 by Sebastiao Camargo.

Corporate Governance. The Company has established some procedures in order to increase the transparency in its management and business administration. Some of those measures were the followings: Committee of independent auditors and Whistleblower policy.

Nowadays the Company is being investigated by the Argentine Antitrust National Commission regarding cement prices and by the SEC involving possible securities fraud committed by its Board of Directors. The Company stated that it is not aware of any proceedings, investigations, or actions by the Argentine Antitrust National Commission for any alleged cartelization of the cement industry, and that it is independent in its pricing policy.

Facilities and geographic location. Loma owns six integrated cement plants (which include lime stone, quarries and calcination Kilns), two cement grinding facilities, one cement blending facility, eleven concrete plants, one lime production facility, one waste blending facility, and it operates one rented aggregates quarry. Loma is the only player in the national industry covering all the regions of the country.

The strategic location of most of its facilities allows Loma to be in close proximity to its customers, limestone quarries, energy supply sources (such as natural gas pipelines), and other suppliers, thus enhancing time to market, increasing operating efficiencies and reducing operating costs.



The Company is increasing its annual installed cement capacity of L'amali plant. This USD 350 million brownfield expansion plan was initiated in 2017 and is estimated to be completed by 2020. The new production line, which will add 2,7 million tons of annual capacity, will consist of a new state-of-the-art kiln, two vertical roller mills to green raw materials and cement as well as a complete system of bagging and palleting.

This expansion will allow LOMA to improve its services in a region of Argentina that account for approximately 42% of the country's cement consumption.

Business units

Cement, concrete and aggregates in Argentina. LOMA is the market leader in the Argentine cement industry, with an installed capacity of 9,1 million of tons per year holding a 45,4% of market share by installed capacity. As it was described before, the Company produces and distributes cement, masonry cement, aggregates, concrete and lime to wholesale distributors, concrete producers and industrial customers.

LOMA's operations are vertically integrated, allowing the Company to capture a greater portion of the cement value chain and reduce dependence on third parties during its production and distribution processes. Sourcing its own limestone, fully own the cement and concrete plants, and operate an extensive logistics and distribution network, which includes a railway concession in Argentina.

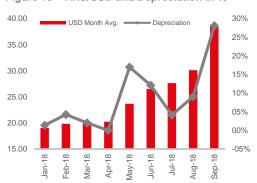


Figure 9 - GDP Growth in % Argentina and Paraguay 2015-2023



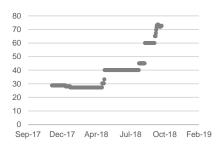
Source: IMF Estimate:

Figure 10 - ARS/USD and Depreciation in %



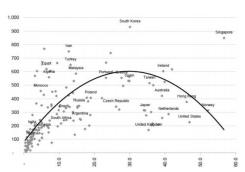
Source: BCRA

Figure 11- Reference interest rate



Source: BCRA

Figure 12 – Correlation GDP and Cement consumption by country.



Source: Earth System Science Data

Cement in Paraguay. LOMA owns 51% of the Paraguayan cement manufactured Yguazu Cementos ("Yguazu"); the other 49% is owned by a local firm, Concrete-mix. Yguazu was founded in 2000 with the aim of importing cement, however, due to a demand increase, the shareholders companies decided to invest in a manufacturing plant, located in Villa Hayes. It has an installed capacity of 400.000 tons per year of cement.

Railway. Ferrosur Roca S.A. ("Ferrosur Roca") is a private company owned by Cofesur, which operates a freight railway network of 3.100 Km of railroads in four provinces. LOMA holds 80% of the stake in Cofesur S.A., while the others 16% and 4% are owned by the state and employees, respectively.

Ferrosur Roca has an strategic value for LOMA as its connects 5 (Olavarria, Barker, Ramallo, Zapala and L'amli) of their 9 plants, with Lomaser, Sola and Bullrich distribution centers, and the capacity to reach the shale oil and gas fields of Vaca Muerta.

Ferrosur Roca holds a 30 years concession granted by the Argentine government which ends in 2023. The connection between Ferrosur Roca network and LOMA plants and distribution centers allows the Company to significantly reduce freight cost, optimize time to market and further improve its competitive position.

Other business. Loma operates and develops co-procesing projects focused on using alternative energy sources through its subsidiary company Recycomb S.A.U ("Recycomb"). This subsidiary recycle industrial waste to later be used as fuel in cement kilns.

Industry Overview & Competitive Landscape Macroeconomics

Argentina. After Argentina's economy growth in 2017 and the current administration won the legislative elections in October 2017, the country economy has shown several weaknesses and deep structural problems. As an example of this, the last run on the Peso Currency has shown to local and international investors that the country's fundamentals are not as strong as everyone thought.

Not only local issues generated the current situation, but also, the US Interest rates hikes and the increasing volatility in emerging markets have fueled the selloff on Argentine currency and assets.

In a first attempt to stabilize the macroeconomic situation, the Central Bank responded to the depreciation by hiking interest rates and selling billions of USD in foreign currency resources to protect the Peso. That resulted in a sharp decline in reserves and a higher default probability perception from international investors, reflected in a sharply increase of the country risk.

After they failed attempt to restore confidence with the three-year USD 50 billion lending Stand by program from the IMF, the government and the IMF announced a USD 7 Bn increase in Argentina's program, together with a front-louded disbursements worth USD 19 Bn.

In order to stabilize its macroeconomics imbalances, Argentina, in concordance with the IMF designed a new economic plan to reduce its primary deficit to zero by 2019. As part of this new agreement, the government plans to reduce **infrastructure spending** to accomplish its new goals.

Finally, Argentina moved from inflation targeting to money-base targeting in order to stabilize USD currency and reduce inflation, which have driven short-term interest rates even higher, leading to a deep **recession**.

Paraguay. The Paraguayan Economy will growth 4.4% this year and 4.2% in 2019. Thus, it will remain as one of the fastest-growing economies in the region. Although poverty and inequality remain serious challenges in the country, the economy has been boosted by a relevant infrastructure investment plan lead by the ex-Presidence Horacio Cartes since 2014.

Paraguay's new president Mario Abdo Benitez, elected in April 2018, is set to keep the market-friendly policies that helped the country over the last few years.

	2015	2016	2017	2018F	2019F	2020F	2021F
GDP (%YoY)	3.08	4.313	4.755	4.443	4.163	3.928	3.861
GDP per capita in USD	5,353.075	5,259.938	5,600.094	5,933.842	6,229.404	6,559.129	6,913.341
Investment (%GDP)	20.848	19.724	19.362	19.397	19.421	19.507	19.479
Inflation (in %)	3.132	4.082	3.614	4.200	4.050	4.000	4.000
Exchange rates (PYG/USD)	5,750.00	5,829.00	5,574.00	5,671.76	5,777.42	5,873.72	5,977.93

Source: IMF Estimates

Cement Consumption and Economic Growth

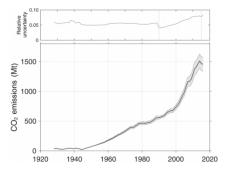
The global cement industry has historically shown a strong positive correlation with GDP growth. With economic growth in emerging countries, rural exodus and demographic dynamism, the planet is experiencing unprecedented urban development and with this growing urbanization, the needs for cement increase at a high rate in these countries.

Trends in the World Cement Industry

The world's largest cement markets are in Asia, Western Europe and North America. However, we believe that the highest growth markets in the cement industry are expected to come from emerging markets such as Latin America and Africa. As emerging countries become more industrialized, consumption of cement tends to grow as income per capita increase, along with higher expenditures in public works and housing.

Nowadays cement demand is primarily derived from the following segments—housing at 60%–65%, infrastructure at 20%–25%, commercial construction at 10%–15%, and industrial at 5%–10%.

Figure 13 - CO₂ Emissions from cement production estimates.



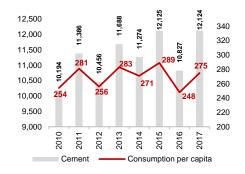
Source: Center for International Climate Research.

Figure 14- CO₂ Emissions from cement production in Argentina



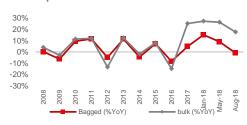
Source: Knonema

Figure 15 – Argentine total and per capital, Cement consumption. In miles.



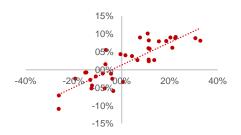
Source: AFCP

Figure 16 - Total and per capital, Cement consumption.



Source: AFCP

Figure 17 – GDP Growth and Cement Dispatches in Argentine since 1980.



Source: AFCP and INDEC

Environment. Currently, the world is facing a serious challenge of climate change, energy and environmental issues and these challenges involve large global industries, with no good substitutes. One of these sectors is the cement industry. Globally the industry produces more than 2.6 billion tons of Portland cement per year, the key material in concrete and responsible for the majority of its global carbon dioxide ("CO2") footprint. Standard Portland cement cannot be made without releasing significant amounts of CO2, which is done in two ways: through burning fuel to produce the very high kiln temperatures needed, or through a calcining chemical reaction that occurs when the limestone is heated. At the most efficient plants, 60% or more of CO2 released might be from this unavoidable chemical reaction.

Substitutes. Cement industry accounts for about 5% of CO2 emissions. About 40%-50% of the CO2 released during cement production is inherent to a process in which limestone is decomposed to form calcium oxide and CO2.As we mentioned the industry currently produces more than 2.6 billion tons of Portland cement per year, and that number figures to increase as populations climb, unless some greener option emerges to supersede it. That's where fly ash concrete comes in.

Since the 1950s, fly ash had started to be used as an additive in cement and concrete. When using as an additive in cement, fly ash can replace some of clay or other silica -or alumina- containing materials because fly ash's composition is very similar to the nature clay. When fly ash is used as a replacement for Portland cement in concrete, it can improve the strength and durability of concrete remarkably. As for the wall materials, fly ash can mix with cement, gypsum and clay to produce autoclaved aerated concrete blocks. Because no high temperature is required, this technique reduces air pollution and decreases energy consumption. Fly ash concrete has the ability to simultaneously curb global carbon emissions while developing better and more durable infrastructure that wouldn't need to be rebuilt as often.

Cement Industry

Argentina. Cement in Argentina is sold to construction retailers, industrial consumers (precast companies) and end-users (construction companies and public entities). Argentina is the third largest cement market in South America, with approximately 12.1 million tons consumed in 2017. The production is exclusively sold and produced domestically. Traditionally, imported cement has not been significant accounting for approximately 0.8% of total consumption in 2017. Similarly, cement exports accounted for approximately 0.7% of total production that year. The relatively small import and export cement markets are primarily the result of high transportation costs resulting from a general lack of infrastructure investments in Argentine ports for unloading cement and the distinctly regional nature of Argentina's cement market.

Buenos Aires account the largest amount of cement dispatches with 4.6 million of tons, followed by Cordoba and Santa Fe with 1.3 and 1.0 million respectively. The rest of the provinces have less than 0.5 million dispatches each. Cement plants usually serve the geographic regions in which they are located, and cement prices may vary in each region, mainly due to transportation costs.

Argentina's recently negative volumes trend is due to a massive deceleration in private and self-consumption. This can be traced back to negative bagged cement volumes.

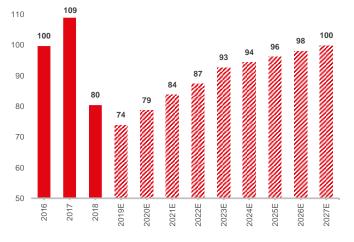
The heat map shows negative industry dispatches volumes in the last few months. During 2017, cement industry was growing in annual terms, but from the second half of 2018, construction activity has drastically decelerated. Also cement cost inflation is accelerating from low 30% to 41,3% in July.

Monthly Data	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Cement dispatches YoY%	19,9%	7,6%	13,4%	24,2%	17,1%	6,9%	19,1%	15,6%	6,2%	13,5%	-4,3%	-3,4%	-6,4%	-0,5%
Construction Activity YoY%	21,3%	14,7%	12,6%	27,8%	22,8%	15,5%	19,5%	19,3%	8,4%	14,4%	7,0%	-0,1%	0,7%	
	35,9%	20,1%	14,1%	11,8%	11,2%	1,7%	-14,3%	2,3%	25,5%	-14,8%	-20,5%	-14,6%	-10,0%	
	32,0%	35,4%	38,9%	42,2%	45,4%	45,9%	46,1%	46,8%	48,3%	50,1%	51,3%	50,1%	47,4%	44,1%
	40,7%	51,2%	63,8%	80,1%	94,1%	106,9%	118,4%	129,0%	141,4%	152,4%	161,0%	161,4%	154,0%	141,4%
Cement cost inflation YoY%	23,6%	23,3%	24,7%	25,2%	22,8%	26,7%	26,4%	28,1%	27,8%	28,5%	34,9%	38,3%	41,3%	

Source: AFCP, INDEC, BCRA.

Loma Negra's USD prices already fell below USD 100 per ton in 2018 because of the peso depreciation. The figure 18 underscores a meaningful lag between ARS depreciation (in terms of ARS/USD) and our forecast of prices increase which is based on inflation estimates. So USD prices should reach its lowest point in 2018 and assuming FX gradually stabilizes its rate of depreciation, we expect prices to recover in the next few years.

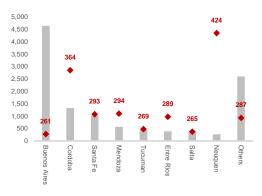
Cement prices in USD



Prices negatively affected by ARS devaluation

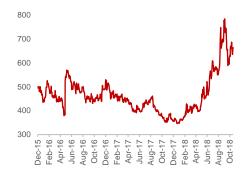
Source: Team estimates

Figure 18 - Total and per capita Cement consumption



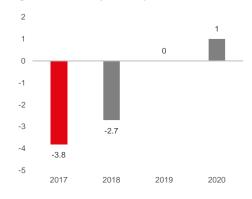
Source: AFCP

Figure 19 - Country Risk - EMBI



Source: Bloomberg

Figure 20 - Primary deficit plan



Source: Ministerio de Hacienda

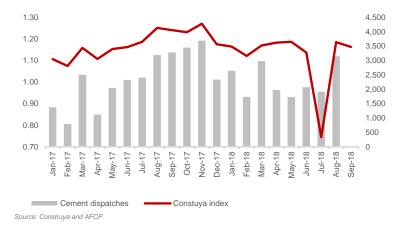
Figure 21 – Government long term infrastructure plan.

Transportation Infrastructure	Federal Infrastructure & Public Works	Power & Renewable Energy
USD 80 Bn+	USD 60 Bn+	USD 35 Bn+
Roads	Water & Sanitation	Renewables
USD 48 Bn	USD 22 Bn	USD 15 Bn
Freight Rail	Irrigation	Hydroelectric
USD 15 Bn	USD 18 Bn	USD 10 Bn
Passanger Rail	Education	Thermal
USD 13 Bn	USD 16 Bn	USD 5 Bn
Airports and Ports	Health	Power Grid
USD 3 Bn	USD 4 Bn	USD 5 Bn
Other*		Nuclear
USD 4 Bn		USD 3 Bn
Mining	Oil & Gas	Real Estate and Urban Development
USD 30 Bn+	USD 25 Bn+	USD 5 Bn+
Ores	Vaca Muerta Shale USD 20 Bn (per year)	Multipurpose Developments USD 350 Mn
hlum, gold, silver, copper, potash, among others		
Patagonia Region	Offshore O&G	Public Housing
16 Projects	7 basins to be explored	1.5 Mn new houses
Northwest Region	O&G Infrastructure	
15 Projects	USD 2 Bn	
Cuyo Region		
13 Projects		
Agribusiness	Telecom & High Technology	Tourism
USD 2 Bn+	USD 2 Bn+	USD 1 Bn+
Forestry	Cell Coverage	Cuyo Region
USD 2.5 Bn	USD 1.5 Bn	USD 21 Mn
	Broadband Coverage	Patagonia Region
	USD 0.5 Bn	USD 17 Mn
		Manhanan Banton

Source: Argentina Investment and Trade promotion Agency

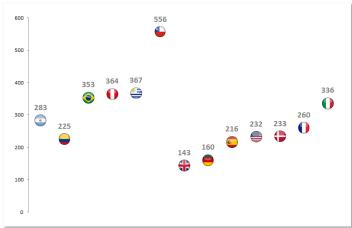
The government new austerity measures could have an immediate negative impact on the construction sector as the budget for public works will be cut by 50% next year. In addition, the interest rates and weakness of the peso makes it hard for local construction companies to complete projects, plan new ones and buy imported materials. Figure 21 shows government primary deficit targets for the next years, and for getting 2019's goal will be necessary a strong public expenditure cuts, so in short terms, construction will be affected for that.

Cement Dispatches (Mn of Tons) and Construya Index



The relatively low cement consumption per capita in Argentina compared to other countries, the housing and infrastructure deficit will translate into growth opportunities in the long-term future once the macroeconomic situation stabilize.

Cement consumption per capita



Low cement consumption per capita in developed countries is mainly explained by environmental pressures on the cement industry

Source: The world cement Industry

Infrastructure deficit. Congested roads, antiquated air traffic systems, and clogged ports... these are just a few of the manifestations of Argentine infrastructure deficit that is undermining the economic efficiency and lowering the quality of life. Decades of underinvestment in basic infrastructure have produced a variety of bottlenecks across transportation, water, freight, and communication networks. Since the current government took the office in 2015, it has identified long term investment opportunities for approximately USD 240 Bn across multiple sectors such as: (i) Energy & mining opportunities add up to USD 90 Bn+ and comprise the development of the vast Vaca Muerta shale oil & gas reserves; (ii) a large transportation plan with USD 80 Bn+ investment projects in roads, freight & passenger rail, ports and airports; and (iii) USD 60 Bn+ in infrastructure opportunities encompass water & sanitation works, land irrigation systems and health & educational facilities.

PPP. Inspired by its application in other countries, the Argentine government established a PPP framework last year. PPPs are at the heart of the Argentine government's ambitious program to rejuvenate its ageing infrastructure and cover the public works cut in the budget. Under PPP programs, private companies finance the project and enter into a long-term contract with the state to recoup their investment. Argentina expects further waves of PPP investment in areas including railways and energy infrastructure to attract a total of USD 26 Bn in investment through 2022.

Paraguay. As we mentioned before Paraguay economy has been growing in the last years mainly driven by the construction, the energy and agricultural sectors. The performance of the construction sector reflects investment by the private and public sector in real state projects, residences as well as large public works such as the extension and improvement of Silvio Pettirossi international Airport and road 2 and 7, among others.

The cement industry in Paraguay is mainly composed by two companies: (i) Industria Nacional de Cementos ("INC"), a Paraguayan state-owned company, and (ii) Yguazu. INC is the largest producer and supplier of cement in the country with a market share of 48%, while Yguazu remains near that level with a 46% of market share.

We believe that the sector shows potential growth opportunities for Yguazu as consequence that Paraguayan cement industry lacks sufficient production capacity to supply the current and estimated economical country's growth.

Figure 22 - Porter Analysis.

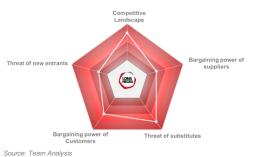


Figure 23 - Installed capacity by company

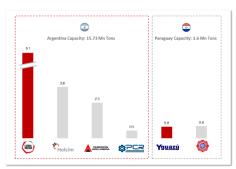


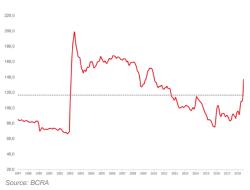
Figure 24 - Loma Performance vs selected **Latam Peers**



Figure 25 - Cement Dispatches and GDP Growth

Source: Team Analysis

Figure 26 - Effective real exchange Rate



Competitors.

Following the consolidation of the cement industry in Argentina during the 1990s, LafargeHolcim, an international cement company, through its acquisition of Juan Minetti S.A. and Corcemar S.A., became the second largest cement producer in Argentina ("Holcim Argentina"). Other Argentine cement producers include Cementos Avellaneda S.A. ("Cementos Avellaneda"), company controlled by Cementos Molins, S.A. and Votorantim Cimentos S.A., and Petroquímica Comodoro Rivadavia S.A.

Favorable market position in Argentina and critical scale represent a significant barrier to entry for new cement players. Cement companies in Argentina are relatively protected from imports since imported raw materials will incur significant incremental costs. Inland logistics also present difficulties for competitors. In addition, its limestone reserves are strategically located close to key markets and any new entrant would find it difficult to secure the sourcing of raw material in main markets.

Cementos Avellaneda. Cementos Avellaneda S.A. ("Cementos Avellaneda") produces and markets Portland cement. The company also manufactures and supplies mortar, lime, tile cement, and concrete. The company was founded in 1919 and is based in Buenos Aires, Argentina. It is a subsidiary of Cementos Molins S.A.

Holcim. Holcim (Argentina) S.A. ("Holcim"), the local subsidiary of global construction materials supplier LafargeHolcim, produces and distributes cement, ready-mix concrete, and aggregates. It was born in 1932 as Cementos Minetti and in 2011, it was acquired by Holcim, which later merged with Lafarge, creating the LafargeHolcim Group. The company operates three cement manufacturing plants, two cement grinding facilities, two ready-mix concrete plants, and one aggregates production facility. In addition, it has two distribution centers and several points of sale operated by Disensa, another LafargeHolcim's company. The firm has a production capacity of 4.8MT of cement and over 250,000m3 of ready-mix concrete, and its headquartered in Buenos Aires.

PCR. Petroquimica Comodoro Rivadavia SA ("PCR") is an Argentina-based company engaged, together with its subsidiaries, in the energy and construction sectors. The Company's operations are divided into two main areas: the production and distribution of construction materials, such as Portland cement, concrete stone blocks, pavers, mortars and adhesives, and the exploration and production of oil. Its energy division is active in the exploitation of the oilfields El Medanito and El Sosneado in Argentina, as well as Palanda Yuca Sur and Pindo in Ecuador. Since 2016 PCR has created a new business unit to develop renewable projects.



Source: Team Analysis

Investment Summary Investment Thesis



Figure 27 – Tons transported by Ferrosur and Cement Dispatches

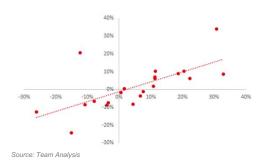


Figure 28 - Target price composition

Relative Valuation (USD MM)	
EV/EBITDA 2018E	8,4x
EBITDA 2018E	148,7
Enterprise value	1.243,6
Net debt	132,2
Minority interest	30,6
Market Cap.	1.080,8
Oustanding shares	119,2
Price Relative Valuation	9,1
Weight of Relative Valuation	25%

Free Cash Flow to the Firm (USD	MM)
Present value FCFF	446,1
Terminal value	670,5
Enterprise value	1.116,6
Net debt	132,2
Minority interest	30,6
Market Cap.	953,8
Oustanding shares	119,2
Price Relative Valuation	8,0
Weight of Relative Valuation	75%
TARGET PRICE	8,3
Source: Team analysis	

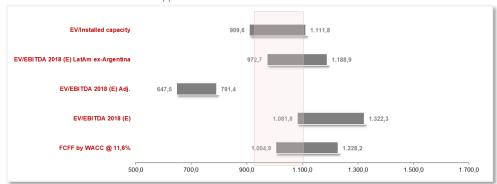
Figure 29 - Sales and growth projection



Source: Team Analysis

Methodology

As previously mentioned, our recommendation for Loma's target price is based on a combination of both the Income and the Market approach.



FCFF. Projections were performed in nominal ARS and then converted to USD with the foreign exchange forecasts detailed in Appendix 5. We considered this to be the best practice, given Argentina's real exchange rate is far from equilibrium.

The explicit planning horizon goes from July 2018 to December 2027 and a terminal value was included.

To simplify the valuation, we projected Loma's consolidated financial statements. Thus, to obtain the Equity value, besides taking into account non-operating assets and liabilities, we also substract Minority interests as of June 30, 2018. Concerning the non-operating assets and liabilities, the accounts we considered are: Cash and cash equivalents, short-term Investments and both current and non-current Borrowings and Other liabilities.

Revenues.

Cement Dispatches. To calculate cement dispatches, we identified three main drivers of cement demand:

- Real GDP Growth. Exist a high correlation between real economic growth and cement dispatches, as it can be seen in Figure 24, which summarizes this relationship with yearly data from 1980 to 201X.
- (2) Gross Capital Investment. We also consider a scenario in which the economy grows but gross capital investment performs mildly. Data from national accounts and information about the government infrastructure plan are used to project this variable.
- (3) Cement Consumption per Capita. The last variable we take into account was cement consumption per capita. As we mentioned before, Argentina is currently below the regional average, so we assume that under normal economic conditions, it should slowly converge to the regional average within the next decade.

To forecast the next ten years of LOMA sales, we developed a multiple linear regression model that includes all the drivers listed above.

A state space model was also estimated to contrast the results of the previous regression. In this second model, observed variables (LOMA's revenues and and cement dispatches) are represented as a function of non-observed states that are jointly estimated with the system parameters: (i) a non-stationary trend, and (ii) a stationary component, the deviations of each variable from the trend. The model is constrained in such a way that the observed variables share a common trend ("Cement Trend") modelled as a random walk but have different deviations from the trend.

Regarding Argentine **cement business unit**, which represents xx% of the total revenues we estimated prices and quantities by separate in order not to assume a constant real exchange rate. In our model, the assumption was that the effective real exchange rate converges to historical values, so ARS prices varied more than forex exchange rate. As for quantities, they were projected assuming no long-term variations in LOMA's market share in terms of cement dispatches. The prices for the cement business unit, were projected considering the IMF CPI estimates for Argentina.

To estimate Paraguay's revenues, we made a lineal regression model including the IMF's GDP real growth forecast. For Ferrosur Roca transported quantities, we used a lineal dependence of the cement dispatches growth, which was previously estimated.

Electrical power cost. RenovAR program, launched under Law 27.191, establishes 20% renewable energy mandate on total installed capacity by 2025, implying an estimated investment of USD 13,8 Bn. As large user, LOMA signed a 20-year PPA with Genneia in October 2017, marking the country's first private energy sales contract from a renewable source. This agreement, which runs from January 2018 to December 2037, implies that Genneia has to sell 60% of available capacity from its 24MW expansion of the Rawson wind farm in Chubut province to LOMA for USD 77 MWh. Then, we assumed that LOMA will continue signing this type of agreements with power generators up to reaching the mandatory 20%.

Terminal Value. We estimated the TV based on Gordon's growth method, considering a normalized cash flow (based on FY2027). The geometric growth rate considered was 2% per annum in USD, in nominal terms, which is in line with the projected US inflation in the long-term. Given we are projecting cash flows for 9 years and 1/2 and Loma is a mature company, we do not expect it will grow. Therefore, the sensitivity analysis in Figure 31 presents a limited range for the growth rate.

Figure 30 - Cement and Volume projection



Figure 31 - Sales and growth projection



Source: Team Analysis

Figure 32 - Cost of Energy in MM

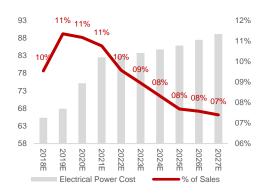
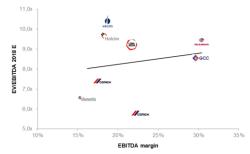
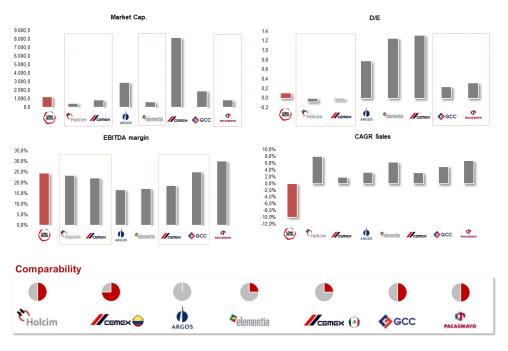


Figure 33 - EV Ebitda vs Ebitda Margin



Source: Team Analysis

Relative Valuation. To value LOMA, we used a relative valuation approach using the trading multiples analysis which we think is appropriate to value the Company due to a large list of comparable entities being public in some major stock exchanges. The peers selection was guided by the following points: (i) region, (ii) size (using Market Cap.), (iii) investment risk (considering their D/E ratio), (iv) cashflow generation (looking EBITDA margin), and (v) growth (analyzing their Sales CAGR). We analyzed four multiples but we identified Enterprise Value ("EV") to Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA") as the most appropriate multiple to compare LOMA to its peers.



Company	P/E	EV/Sales	EV/EBITDA	EV/Installed
Company	2018E	2018E	2018E	capacity
Holcim Argentina SA	14,3x	1,3x	9,6x	130,9x
CEMEX Latam Holdings SA	9,1x	0,7x	5,8x	111,3x
Cementos Argos SA	38,2x	1,9x	10,2x	235,4x
Elementia SAB de CV	18,0x	1,1x	6,5x	466,7x
Cemex SAB de CV	11,0x	1,4x	7,4x	211,0x
Grupo Cementos de Chihuahua SAB de CV	22,0x	2,5x	8,7x	n.m.
Cementos Pacasmayo SAA	15,3x	3,0x	9,4x	144,6x
Average Adj.	15,2x	1,9x	8,4x	128,9x
Average	18,3x	1,7x	8,2x	216,7x
Min.	9,1x	0,7x	5,8x	111,3x
Max.	38,2x	3,0x	10,2x	466,7x

Financial Analysis

Revenue. LOMA's revenues are mainly driven by Argentina cement (c80% of net revenues) which implies a low country economic environment risk diversification. The company also has three other Argentina based business lines, concrete, railroads and aggregates each of them representing less than 10%. Only a small portion (7.5% of net revenues as of FY17) is exposed to Paraguay's country risk. Putting all together we see a company strongly dependent on the future development of the economic situation of Argentina. Last three years were positive in revenue growth to this company being 2017 a peak in net revenues growth (38% in USD) driven by revenue growth in the cement, masonry and lime segments. As of June 2018, LOMA had been able to make a correct pass-through inflation to prices.

Main Expenses. Cost of sales increased 33% (in USD) YoY in 2017 due to the peso depreciation which impact directly in the cost structure of the Company as either thermal costs and electricity costs are denominated in USD. Other main cost component is labor's expense which is linked to inflation. For the end of 2018 and the coming years, we expect an increase in COGS due to high dollar linked costs of 40% but also we discounted a better use of energy due to L'Amalí plant expansion's saving of 30%.

Margins. The Company had been able to maintain a healthy gross margin between 26%-28% in the last three years and we expect company should improve this margin thanks to L'Amalí plant expansion. EBITDA margin was around 21%-24% in the last three years. For those years, EBITDA drivers were lower inflation rates, peso appreciation and government expense in public works. Argentine lines margins had been resilient in the past, so the question here is: will be Argentine lines margins resilient enough in the future? Paraguay margins were strong enough and we do not expect relevant changes.

Figure 34 - Voting Intention



Source: Management and Fit as of October 2018

Figure 35 - Risk Assesment

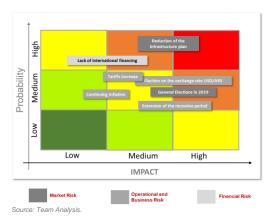


Figure 36 - Sensitivity Analysis



Source: Management and Fit as of October 2018

CAPEX. LOMA is investing aggressively in CAPEX to add a second line in L'Amalí facility. The Company will add 2.7m tons capacity. This expansion will be operative by 2020. USD 320 MM are the remaining capex, which USD 60 MM were payable in 2018, USD 180 MM in 2019 and the rest in 2020. This plant will lead a better market supply rather than an increase in market supply. From 2019 we included a partial disbursement of a USD 91 MM investment related to the expansion of Yguazu's plant. Speaking of CAPEX Loma put all the players in the field with the second line of L'Amalí and we project this to ride a more efficient manage of costs. This effect is clearly reflected in the CAPEX/Revenues ratio and we excluded 2017 ration in the assumptions to project the CAPEX in order to offset extraordinary impact.

This business is clearly financed with its suppliers and enable the company to keep a low working capital. Company's financial performance in this topic is efficient and demonstrate a most than health of its finance.

Capital Structure. The Company was able to maintain low leverage ratios compared to its peers., showing a 0.8x Net debt/EBITDA as of 2Q18 and we considered that this number should be near 2.0x in the future considering the capital structure of LatAm's comparable companies.

EBITDA.Loma Negra was able to improve its EBITDA margin in the last five years. Total increase from 2014 to 2017 is 520 bps reaching in the last year a 24.7% EBITDA margin. This year we see the company could maintain a healthy 24.1% in the first half but we expect company to shrink this margin and we are forecasting a 17.7% for the second half. We then consider the improving margins trend to make pause and then back to the game.

Investment Risks

Political and economic instability in Argentina. In 2019 If the Macri administration fails to win in the next elections, it could mean a radical change in economic policies. The capital market would react negatively, affecting the Argentine assets listed on NYSE and in the local market. Also, access to foreign exchange market could be more restrictive, imposing LOMA to access international capital markets.

Extension of the recessive period. According to the latest revision of the IMF, the recession in Argentina economy will last until 2019, with a 2.6% drop in GDP.

Continuing inflation may affect the Company margins. According to estimates, Argentina's 2018 inflation will be around 40% and for 2019, estimates are around 20%. Inflationary pressure will have a negative impact on LOMA's margins, given the impossibility of doing the pass-through of the inflation and devaluation to its clients.

Fluctuation on the exchange rate ARS/USD. LOMA has a high exposure to dollar variations, due to dollarized energy costs and currents liabilities in foreign currency. An increase in the exchange rate, would negatively affect LOMA's result of operations and financial condition.

Tariffs increase and pressure from the labor unions requiring salary increase or additional benefits. Fuel expenses and energy tariffs are significant in LOMA business. Fuel prices have historically been volatile and may continue in the future. Thermal and electricity cost represent around 20% of total cement production. LOMA's operations results may be adversely affected by higher cost of energy.

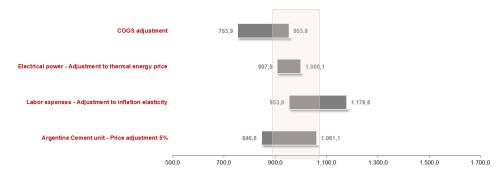
Argentine employers have experienced significant pressure from labor unions in order to get further increase of salaries. Average wages in the cement industry increased above the average of private sector.

Capital market condition. Argentine companies and government's ability to obtain financing from international markets is limited, which may impair its ability to implement reforms and foster economic growth and develop investment project.

Reduction of the infrastructure plan and failure of the PPP projects. Due to the recent political and economic turmoil, the National Government has cut the budget for the execution of public works, which may affect the national demand for cement.

Sensitivity Analysis.

Based on our insights, we also performed a sensitivity analysis on some key operational and business variables. The most relevant was the one performed on the cement price as given the volatility and the depreciation of the Argentine currency we have some concerns about the pass-through of these additional costs. Furthermore we made some other scenarios adjusting the following expenses: labor, electrical power and COGS.



Appendix 1 Glossary

ADR: American Deposit Receipt. It is a negotiable security that represents securities of a non – US company that trades in a US financial market.

ARS: Argentine peso

BV: Book value

Bn: Billions

CAGR: Compund Annual Growth Rate. It is the mean annual growth rate that provides a constant rate of return over a specific time period.

EBITDA:Earnings before interest, taxes, depreciation and amortization

EM: Emerging Market

EMBI: Emerging Markets Bond Index

EV: Enterprise Value

FX: Foreign Exchange

F: Forward

GDP: Gross Domestic product

IMF: International Monetary Fund

IPO: Initial Public Offering

LC: Local currency

LOMA: Loma Negra

LN: Loma Negra

LTM: Last twelve months

MSCI: Morgan Stanley Capital International Index.

MM: Millions

N.A.: Not available

Payout Ratio: Dividends dividend by Net Income. The proportion of Net Income that a company distributes to its shareholders.

P/E: Price-to-Earnings Ratio. Company's stock price over net income.

PV: Present Value

ROA: Return on Assets

ROE: Return on Equity

S.A.: Sociedad Anónima

SEC: Security Exchange Comissions

USD: United States Dollars

TN: tons

TV: Terminal Value

WACC: Weighted average cost of capital

Appendix 2 Balance sheet

Balance sheet	2016	2017	1H18	2H18E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
In millions of USD Property, plants and equipment	307.941	318.452	259.234	191.608	191.608	349.141	430.206	458.782	441.737	444.063	451.871	466.154	483.773	503.690
Intangible assets	3.599	4.020	2.507	1.606	1.606	1.156	863	624	491	465	443	425	410	398
Investments	21	18	11	8	8	6	6	5	5	5	4	4	4	4
Goodwill	2.482	2.096	1.363	917	917	771	691	626	572	542	516	495	478	464
Inventories	11.105	11.437	9.231	6.212	6.212	5.218	4.681	4.238	3.872	3.667	3.492	3.349	3.235	3.139
Other receivables	14.465	7.733	21.661	1.052	1.052	1.050	1.051	1.028	990	974	962	953	947	944
Account receivables	4.948	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-current assets	344.562	343.755	294.008	201.402	201.402	357.341	437.498	465.303	447.666	449.715	457.288	471.380	488.847	508.639
Inventories	108.332	97.676	96.223	44.760	44.760	39.361	36.970	35.040	33.510	33.223	33.123	33.256	33.627	34.164
Other receivables	14.278	12.872	15.092	10.155	10.155	8.531	7.654	6.929	6.330	5.995	5.709	5.475	5.288	5.132
Account receivables	39.694	67.295	58.807	32.351	32.351	36.138	42.110	48.183	54.650	59.773	65.301	71.761	74.409	77.814
Cement, masonry cement and lime - Arg				22.010	22.010	26.040	30.022	34.006	38.781	41.803	46.186	49.165	50.622	53.494
Concrete				3.629	3.629	2.499	3.545	4.659	5.533	6.812	7.241	9.975	10.578	10.471
Railroad (Cofesur)				3.110	3.110	3.610	4.010	4.315	4.572	4.700	4.965	5.116	5.208	5.359
Cement - Paraguay (Yguazu)				5.523	5.523	6.216	6.963	7.763	8.404	9.099	9.657	10.248	10.766	11.310
Aggregates				572	572	665	779	891	1.010	1.105	1.207	1.325	1.374	1.437
Others				250	250	291	341	390	442	484	528	580	602	629
Eliminations				- 2.743	- 2.743	- 3.184	- 3.551	0.0.0	- 4.092	- 4.231	- 4.483	- 4.649	- 4.741	- 4.887
Cash & Cash equivalents (includ. Investments)	58.552	169.365	56.061	93.398	93.398	- 8.492	- 45.196	- 60.759	- 15.506	37.913	96.072	161.635	222.420	285.909
Current assets	220.857	347.208	226.182	180.664	180.664	75.537	41.537	29.393	78.985	136.904	200.204	272.127	335.744	403.019
Total Assets	565.419	690.962	520.190	382.067	382.067	432.878	479.035	494.697	526.651	586.618	657.492	743.507	824.592	911.657
Capital stock and other capital related accounts	5.502	102.380	66.597	44.815	44.815	37.644	33.774	30.577	27.933	26.454	25.193	24.161	23.337	22.648
Reserves	2.757	3.151	57.169	38.471	38.471	32.315	28.993	26.249	23.979	22.709	21.627	20.741	20.033	19.442
FX difference						- 6.160	- 4.182	- 2.219	4.300	14.194	25.159	38.350	53.138	68.612
Net result of the period				15.309		67.068	81.499	100.680	132.232	150.930	173.232	199.545	203.789	211.617
Retained earnings	29.032	84.736	24.446	16.450	39.764	33.401	84.614	146.604	221.556	329.641	453.859	597.458	765.861	937.649
Dividends paid						-	-	- 53.710	- 124.252	- 204.769	- 297.184	- 403.636	- 512.352	- 625.245
Accumulated other comprehensive income	9.419	13.340	18.356	12.352	12.352	10.376	9.309	8.428	7.699	7.291	6.944	6.659	6.432	6.242
Equity attributable to the owners of the Company	46.710	203.607	166.568	135.401	135.401	174.643	234.009	256.609	293.447	346.450	408.829	483.278	560.239	640.966
Non-controlling interests	24.615	31.599	30.581	20.579	20.579	17.286	15.509	14.041	12.827	12.147	11.568	11.095	10.716	10.400
Total shareholder's equity	71.325	235.205	197.149	155.980	155.980	191.929	249.518	270.650	306.274	358.598	420.397	494.373	570.955	651.366
Berrowings	80.570	138.716	07 222	58.701	58.701	49.308	44.239	40.052	36.589	34.650	32.999	31.648	30.568	20.665
Borrowings Account payables	5.168	3.803	87.232 2.931	1.973	1.973	1.657	1.487	1.346	1.230	1.164	1.109	1.063	1.027	29.665 997
Provisions	7.614	8.581	6.782	4.564	4.564	3.833	3.439	3.114	2.845	2.694	2.565	2.460	2.376	2.306
Tax liabilities	69	18	0.702	4.504	4.504	-	3.433	3.114	2.043	2.034	2.505	2.400	2.570	2.300
Other liabilities	1.784	838	488	329	329	276	248	224	205	194	185	177	171	166
Deferred tax liabilities	18.479	12.213	11.437	7.696	7.696	6.465	5.800	5.251	4.797	4.543	4.326	4.149	4.008	3.889
Non-current liabilities	113.683	164.169	108.870	73.261	73.261	61.539	55.213	49.987	45.665	43.246	41.184	39.498	38.150	37.024
Borrowings	193.182	93.724	99.509	66.962	66.962	56.247	50.465	45.689	41.738	39.527	37.643	36.102	34.870	33.840
Account payables	140.446	125.787	80.943	72.329	72.329	108.970	109.085	112.774	116.496	127.975	140.119	154.351	160.956	169.184
Electrical power				3.668	3.668	5.069	5.857	6.459	6.525	6.699	6.799	6.909	7.064	7.216
Suppliers				401	401	353	332	314	300	298	297	298	302	306
Other costs of sales				53.835	53.835	63.002	74.470	85.874	98.168	108.393	119.295	132.082	137.964	145.318
Freight (commercial expense)				366	366	430	483	518	534	556	580	605	630	655
Other Selling & Admin expenses				754 13.304	754 13.304	877 39.240	1.029 26.915	1.179 18.431	1.338 9.630	1.468 10.561	1.604 11.543	1.764 12.693	1.830 13.167	1.914 13.774
CapEx to be paid Prepayments	6.748	10.992	5.399	3.633	3.633	39.240	20.915	2.479	2.264	2.144	2.042	1.959	1.892	1.836
Salaries and social security charges	23.984	28.860	14.897	6.240	6.240	7.337	8.182	8.760	9.041	9.391	9.751	10.131	10.524	10.919
Operating	20.304	20.000	17.03/	5.281	5.281	6.209	6.924	7.413	7.652	7.948	8.253	8.574	8.907	9.240
Administrative and Commercial				959	959	1.128	1.258	1.346	1.390	1.443	1.499	1.557	1.618	1.678
Tax liabilities	14.201	30.525	12.432	2.994	2.994	3.245	3.331	3.903	4.757	5.344	5.981	6.733	6.897	7.152
Taxes, contributions and commissions	17.201	00.020	12.702	950	950	1.099	1.213	1.275	1.291	1.319	1.348	1.378	1.409	1.439
Tax on debits and credits - to be paid				-	-	-				-	-		-	-
Income tax to be paid				2.044	2.044	2.145	2.118	2.628	3,466	4.026	4.633	5.355	5.488	5.712
Other liabilities	1.850	1.700	991	667	667	560	503	455	416	394	375	360	347	337
Current liabilities	380.411	291.588	214.171	152.825	152.825	179.410	174.305	174.059	174.712	184.775	195.911	209.635	215.486	223.267
Total shareholder's equity and liabilities	565.419	690.962	520.190	382.067	382.067	432.878	479.035	494.697	526.651	586.618	657.492	743.507	824.592	911.657
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Appendix 3 Income statement

Income Statement In millions of USD	2016	2017	1H18	2H18E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Net revenue	668.120	922.735	430.007	254.768	684.775	598.699	672.791	767.218	867.328	934.821	1.019.017	1.116.667	1.154.381	1.204.767
Cement, masonry cement and lime - Argentina	562.565	703.172	319.477	173.039	492.517	438.342	483.772	545.622	619.596	656.431	723.277	767.292	787.297	830.012
Concrete	70.677	114.891	69.287	11.914	81.201	42.065	57.124	74.752	88.396	106.963	113.395	155.681	164.514	162.470
Railroad (Cofesur)	82.796	97.068	42.836	26.767	69.603	60.766	64.618	69.242	73.039	73.811	77.747	79.837	80.989	83.149
Cement - Paraguay (Yguazu)		69.574	33.096	51.328	84.424	95.023	106.443	118.666	128.478	139.102	147.623	156.666	164.584	172.903
Aggregates	12.821	15.772	6.336	6.470	12.806	11.196	12.560	14.296	16.131	17.357	18.904	20.685	21.374	22.299
Others	5.118	8.035	2.447	3.159	5.606	4.901	5.498	6.258	7.061	7.598	8.275	9.054	9.356	9.761
Eliminations	- 65.856 -	85.778 -	43.472 -	17.908 -	61.380 -	53.592 -	57.223 -	61.618 -	65.372 -	66.440 -	70.205 -	72.547 -	73.734 -	75.826
Cost of sales (exclud. DD&AA)	- 457.950 -	616.527 -	290.056 -	191.176 -	481.232 -	434.420 -	484.506 -	545.258 -	599.276 -	637.780 -	686.707 -	743.022 -	770.913 -	805.598
Cost of sales (excluding certain items)	- 306.006 -	432.742 -	198.814 -	123.031 -	321.844 -	283.330 -	320.590 -	368.107 -	419.010 -	454.732 -	499.107 -	550.709 -	573.236 -	602.383
Operating salaries and SS charges	- 100.225 -	125.971 -	58.117 -	35.939 -	94.055 -	83.182 -	88.804 -	94.669 -	97.293 -	99.327 -	102.857 -	106.500 -	110.245 -	114.109
Electrical power	- 51.719 -	57.814 -	33.125 -	32.207 -	65.333 -	67.908 -	75.113 -	82.482 -	82.973 -	83.722 -	84.743 -	85.813 -	87.433 -	89.106
Gross profit	210.170	306.208	139.951	63.592	203.543	164.279	188.284	221.961	268.052	297.041	332.309	373.645	383.468	399.169
Gross margin	31,5%	33,2%	32,5%	25,0%	29,7%	27,4%	28,0%	28,9%	30,9%	31,8%	32,6%	33,5%	33,2%	33,1%
Share of profit (loss) of associates	2.479							-						
SG&A (exclud. DD&AA)	- 62.014 -	71.492 -	31.596 -	22.370 -	53.966 -	47.339 -	51.080 -	55.143 -	57.884 -	59.813 -	62.694 -	65.875 -	67.909 -	70.229
Selling & Admin expenses (excluding certain items)	- 14.077 -	17.265 -	8.884 -	4.551 -	13.435 -	11.746 -	13.200 -	15.053 -	17.017 -	18.341 -	19.993 -	21.909 -	22.649 -	23.637
Admin & Commercial salaries and SS charges	- 22.930 -	22.877 -	9.884 -	7.197 -	17.081 -	15.107 -	16.128 -	17.193 -	17.669 -	18.039 -	18.680 -	19.341 -	20.022 -	20.723
Taxes, contributions and commissions	- 16.874 -	22.557 -	9.097 -	7.827 -	16.924 -	14.726 -	15.556 -	16.282 -	16.410 -	16.481 -	16.795 -	17.116 -	17.442 -	17.775
Freight - Commercial exp	- 8.133 -	8.793 -	3.731 -	2.794 -	6.525 -	5.760 -	6.196 -	6.616 -	6.788 -	6.953 -	7.226 -	7.509 -	7.796 -	8.094
Other gains and losses	8.380	4.748 -	173	3.296	3.123	2.345	2.246	2.188	2.098	2.030	1.998	1.973	1.955	1.942
Tax on debits and credits	- 9.475 -	11.349 -	4.435 -	2.109 -	6.543 -	6.231 -	6.663 -	7.198 -	7.769 -	8.354 -	9.116 -	9.998 -	10.415 -	10.869
Operating FX difference				2.561	2.561	1.043	714	731	730	476	458	416	365	331
EBITDA	149.540	228.114	103.748	44.971	148.719	114.099	133.501	162.539	205.227	231.379	262.955	300.160	307.463	320.343
EBITDA margin	22,4%	24,7%	24,1%	17,7%	21,7%	19,1%	19,8%	21,2%	23,7%	24,8%	25,8%	26,9%	26,6%	26,6%
Depreciations & Amortizations	- 34.445 -	39.297 -	18.593 -	6.751 -	25.343 -	18.288 -	24.835 -	28.300 -	28.918 -	30.139 -	31.978 -	34.100 -	35.744 -	38.187
Depreciations		-	18.159 -	6.847 -	25.006 -	18.075 -	24.652 -	28.135 -	28.835 -	30.139 -	31.978 -	34.100 -	35.744 -	38.187
Amortizations		-	433	96 -	337 -	213 -	183 -	165 -	83	-	-	-	-	-
EBIT	115.095	188.817	85.155	38.221	123.376	95.811	108.666	134.240	176.309	201.240	230.977	266.060	271.719	282.157
Finance costs, net	- 63.689 -	50.834 -	38.034		38.034	-	-	-	-	-	-	-	-	-
Exchange rate differences	- 17.661 -	18.897 -	28.918	-	28.918									
Financial income	2.784	6.267	7.918		7.918									
Financial expenses	- 48.812 -	38.204 -	17.035	-	17.035									
Profit before tax	51.406	137.983	47.121	38.221	85.341	95.811	108.666	134.240	176.309	201.240	230.977	266.060	271.719	282.157
Income tax expense	- 17.439 -	35.345 -	13.492 -	22.912 -	42.677 -	28.743 -	27.166 -	33.560 -	44.077 -	50.310 -	57.744 -	66.515 -	67.930 -	70.539
Current	- 16.151 -	39.303 -	9.012 -	22.912 -	36.404 -	28.743 -	27.166 -	33.560 -	44.077 -	50.310 -	57.744 -	66.515 -	67.930 -	70.539
Deferred	- 1.288	3.958 -	4.481 6.273		6.273									
Net profit	33.967	102.638	33.628	15.309	42.664	67.068	81.499	100.680	132.232	150.930	173.232	199.545	203.789	211.617
Net profit margin	5,1%	11,1%	7,8%	6,0%	6,2%	11,2%	12,1%	13,1%	15,2%	16,1%	17,0%	17,9%	17,7%	17.6%

Appendix 4 Key financial ratios

Key historic ratios	2014	2015	2016	2017
MUSD				
Revenues	- 542 -	627 -	492 -	655
EBITDA	-	-	-	-
Operating CF	109	149	109	194
Accumulated CF	31	25	51	192
Operating Ratios				
WK/Revenues	1,4%	1,2%	1,4%	1,3%
Operating CF/Revenues	-20,1%	-23,8%	-22,2%	-29,7%
EBITDA margin	0,0%	0,0%	0,0%	0,0%
Invested Capital Ratios				
Capex/Revenues	0,0%	0,0%	0,0%	0,0%
Capital Expenditures	-	-	-	-

Appendix 5 Valuation assumptions

Macroeconomic assumptions	Source*	Unit	2016	2017	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
CPI - US - EoP	EIU	%	1,3%	2,1%	2,1%	2,0%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,99
CPI - US - Av.	EIU	%	0,7%	1,7%	2,0%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,99
CPI - ARG - EoP	LatinFocus Consens	%	41,0%	24,8%	44,7%	27,1%	18,8%	13,5%	8,2%	7,6%	7,0%	6,3%	5,5%	5,09
CPI - ARG - Av.	LatinFocus Consens	%	41,2%	27,7%	32,7%	37,7%	23,0%	16,1%	10,8%	7,9%	7,3%	6,6%	5,9%	5,39
CPI - PY - EoP	IMF	%	3,9%	4,5%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,09
CPI - PY - Av.	IMF	%	4,1%	3,6%	4,2%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,09
FXARS:USD - EoP	LatinFocus Consens	ARS/USD	15,85	18,77	42,89	51,06	56,91	62,86	68,81	72,66	76,30	79,55	82,36	84,8
FXARS:USD - Av.	LatinFocus Consens	ARS/USD	14,78	16,57	29,30	46,37	53,99	59,89	65,84	70,73	74,48	77,92	80,96	83,6
FXARS:USD - Real	Our calculation	ARS/USD	1,13	1,09	1,76	1,68	1,61	1,59	1,64	1,64	1,64	1,64	1,64	1,64
FXPYG:USD - EoP	IMF	PYG/USD	5.767	5.574	5.672	5.777	5.874	5.978	6.085	6.193	6.314	6.438	6.564	6.693
FXPYG:USD - Av.	IMF	PYG/USD	5.668	5.619	5.623	5.725	5.826	5.926	6.031	6.139	6.253	6.376	6.501	6.628
Av. Depreciation ARS	Our calculation	%	59,5%	12,1%	76,9%	58,3%	16,4%	10,9%	9,9%	7,4%	5,3%	4,6%	3,9%	3,39
Av. Depreciation PYG	Our calculation	%	8,8%	-0,9%	0,1%	1,8%	1,8%	1,7%	1,8%	1,8%	1,9%	2,0%	2,0%	2,09
Real Argentine GDP growth	IMF	%	-1,8%	2,9%	-2,8%	-1,7%	2,7%	3,1%	3,4%	3,6%	3,0%	3,0%	3,0%	3,0

Appendix 6 WACC

				EV/EBIT DA			5y Weekly						
Peers	Mkt Cap (mn)	EV (mn)	2018E	2019E	2020E	Country	Beta	R2	Debt	Cash	NDF	Wd	5Y/W
Cementos Argos SA	2.912	5.413	10,2x	8,7x	7,8x	COLOMBIA	1,1	0,5	2.471	186	2.285	44,0%	0,71
Elementia SAB de CV	650	1.633	6,5x	5,4x	4,8x	MEXICO	0,7	0, 1	950	138	812	55,5%	n.m.
Cerrex SAB de CV	8.172	19.627	7,4x	6,5x	5,8x	MEXICO	1,4	0,3	11.489	698	10.791	56,9%	0,76
Grupo Cementos de Chihuahua SAB de CV	1.895	2.320	8,7x	7,5x	6,7x	MEXICO	0,5	0,0	686	234	452	19,3%	n.m.
Cementos Pacasmayo SAA	880	1.157	9,4x	8,0x	7,2x	PERU	0,6	0,0	298	15	283	24,3%	n.m.
Birla Corporation Ltd	599	1.137	8, 0x	6,8x	8,0x	INDIA	1,0	0, 1	634	97	537	47,3%	0,64
India Cements Ltd	388	881	NA.	N.A.	NA.	INDIA	1,6	0,3	495	9	487	55,6%	0,88
Prism Johnson Ltd	601	884	10,9x	8,5x	7,1x	INDIA	1,3	0,2	257	17	240	28,6%	1,05
Gansu Qilianshan Cement Group Co Ltd	748	943	NA.	N.A.	NA.	CHINA	1,2	0,4	424	110	315	29,6%	0,91
Lafarge Holcim	27.948	47.346	7, 6x	7,1x	6,6x	SWITZERLAND	1,2	0,5	19.001	4.331	14.669	34,4%	0,88
Heidelbergcement	13.612	26.743	7, 0x	6,4x	5,9x	G⊞MANY	0,9	0,5	12.888	2.547	10.340	43,2%	0,61
V ulcan Materials	13.568	16.508	14,6x	12,2x	10,6x	JNITED STATES	0,9	0,2	2.855	142	2.713	16,7%	0,82
Min.			6,5x	5,4x	4,8x		0,5	0,0				16,7%	0,61
Max.			14,6x	12,2x	10,6x		1,6	0,5				56,9%	1,05
Mediana			8,3x	7,3x	6,9x		1,0	0,2				38,8%	0,82
Promedio			9, 0x	7,7x	7,0x		1,0	0,3				37,9%	0,81
Promedio (Latam ex Arg)			8,4x	7.2x	6.5x		0,8x	0.2x				40%	0,74

	WACC USD	Source / Notes
	Nominai	Source / Notes
rf	3,2%	Market yield on US Treasury securities at 10-year constant maturity, quoted on investment basis. Source: US Federal Reserve.
CR	5,4%	Weighted average based on Sales in Argentina and Paraguay of the spot EMBH elaborated by JP Morgan.
	8,5%	
Bu	0,82	5Y weekly. Based on 10 comparable companies
BI	1,16	of weekly. Dased on to comparable companies
(rm - rf)	5,5%	Based on anlyst consensus
Ke	14,9%	Ke = rf + rc + BI * (rm - rf) + Sp
Kd	9,5%	Rf + Default spread (based on coverage ratio) + NIP + Weighted average CR (EMBI+
t	33,9%	Weighted average tax rate which considers both the Income tax and the Withholding on Dividends in Argentina and Paraguay.
Kd (at)	6,3%	$Kd (at) = (kd + rc)^*(1 - t)$
D		Based on 10 comparable companies
E	61%	
	11,6%	WACC (at) = Ke * E + Kd (at) * D
	CR Bu Bl (rm - rf) Ke Kd t	USD Nominal USD Nominal

Risk free rate in nominal terms

Market yield on U.S. Treasury securities at 10-year constant maturity, quoted on investment basis

October 31, 2018

Source: US Federal Reserve.

Country Risk premium

	Av. Last 6m
EMBI+ Argentina	5,7%
EMBI+ Paraguay	2,2%
Weighted average	5,4%
USD	FY 2017
Consolidated Sales	922.735
Sales in Paraguay	69.613
Sales in Argentina	853.122

We estimated a WACC after taxes in nominal USD, consistent with the cash flows to be discounted, of 11.6%.

A weighted average Country Risk Premium (CRP) based on FY 2017 Sales was estimated, considering the six-month average of J.P. Morgan EMBI for both Argentina and Paraguay. Argentina's weight on this calculation is c.93%. In such way we intend to account for the increase in Argentina's CRP in the past months, without, however, considering the spot CRP which would be too harsh on the cash flow.

Based on an analysis of various market information providers and current local market practice, we have considered an equity market risk premium of 5.5%.

An average unlevered guideline beta for the Company is 0.82, representing the estimated sensitivity of the selected guideline public companies' stock returns to that of the overall market portfolio.

Please refer to Appendix xx to view the detail of our WACC estimate. Also, in figure 31 a sensitivity analysis concerning the WACC can be found.

Appendix 7 Free Cash Flow to the Firm

Cash Flow In millions of USD	1H18	2H18E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	Normalized
EBITDA	103.748	44.971	148.719	114.099	133.501	162.539	205.227	231.379	262.955	300.160	307.463	320.343	326.750
Operating Income tax	- 19.765	- 22.912	- 42.677	- 28.743	- 27.166	- 33.560	44.077	- 50.310 -	57.744 -	66.515 -	67.930	- 70.539	- 71.950
CapEx	- 88.025	- 13.522	- 101.547	- 225.301	- 147.932	- 100.868	52.481	- 56.565 -	61.660 -	67.569 -	69.851	72.899	- 74.357
Working Capital variation -	- 113.596	102.203	- 11.394	44.206	1.988	4.774	3.678	10.042	10.294	11.323	6.486	7.093	1.321
Operating CF	- 117.639	110.739	- 6.900	- 95.739	- 39.610	32.885	112.346	134.546	153.845	177.400	176.168	183.997	181.764

Valuation (USD '000) Unit		2H18E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Discount rate (After taxes WACC) % Growth rate %	11,6% 2,00%										
Discount period Discount factor		0,5 0,95	1,5 0,85	2,5 0,76	3,5 0,68	4,5 0,61	5,5 0,55	6,5 0,49	7,5 0,44	8,5 0,39	9,5 0,35
FCF Normalized CF Terminal value		35.458	- 94.779	- 31.291	48.099	133.348	165.226	189.282	217.223	226.215	235.924 244.031 2.548.262
DCF		33.568	- 80.418	- 23.795	32.782	81.454	90.455	92.873	95.524	89.157	983.472

In millions of USD	
Enterprise Value	1.395
EV / EBITDA FY17	-3,4x
EV / EBITDA FY18	12,3x
Net Debt	132
Non-operating liabilities	188
Non-operating assets	56
Minority interest	31
Equity Value	1.232
Shares o/s m	119.21

Appendix 8 Relative valuation methods

Trading multiples 2018E from 18 selected global periods

0	Country	Market Cap.	EV	Installed		F	P/E			EV/S	ales			EV/E	BITDA		EV/Installed
Company	Country	warket Cap.	EV	capacity (MM	LTM	2018E	2019E	2020E	LTM	2018E	2019E	2020E	LTM	2018E	2019E	2020E	capacity
Holcim Argentina SA	ARGENTINA	465,8	471,2	3,6	15,8x	14,3x	10,3x	n.a.	2,3x	1,3x	1,0x	0,9x	10,5x	9,6x	7,0x	n.a.	130,9x
CEMEX Latam Holdings SA	COLOMBIA	863,3	845,9	7,6	32,8x	9,1x	7,6x	7,0x	0,9x	0,7x	0,7x	0,6x	4,4x	5,8x	4,9x	4,1x	111,3x
Cementos Argos SA	COLOMBIA	2.912,4	5.413,2	23,0	n.m.	38,2x	18,2x	14,1x	2,1x	1,9x	1,8x	1,7x	11,9x	10,2x	8,7x	7,8x	235,4x
Elementia SAB de CV	MEXICO	649,9	1.633,3	3,5	21,5x	18,0x	8,2x	7,6x	1,2x	1,1x	1,1x	1,0x	7,4x	6,5x	5,4x	4,8x	466,7x
Cernex SAB de CV	MEXICO	8.171,6	19.626,8	93,0	18,0x	11,0x	9,8x	7,8x	1,6x	1,4x	1,3x	1,4x	10,2x	7,4x	6,5x	5,8x	211,0x
Grupo Cementos de Chihuahua SAB de CV	MEXICO	1.894,7	2.319,6	5,1	22,0x	22,0x	13,9x	12,3x	2,9x	2,5x	2,4x	2,2x	10,9x	8,7x	7,5x	6,7x	454,8x
Cementos Pacasmayo SAA	PERU	880,1	1.157,1	8,0	29,2x	15,3x	11,6x	16,2x	3,3x	3,0x	2,8x	2,5x	10,7x	9,4x	8,0x	7,2x	144,6x
Birla Corporation Ltd	INDIA	599,4	1.136,8	15,5	25,2x	18,3x	13,5x	14,6x	1,4x	1,3x	1,2x	1,1x	10,3x	8,0x	6,8x	8,0x	73,3x
India Cements Ltd	INDIA	388,5	881,3	9,0	n.m.	23,2x	12,6x	n.a.	1,2x	1,1x	1,0x	0,9x	9,4x	n.a.	n.a.	n.a.	97,9x
Prism Johnson Ltd	INDIA	601,2	883,6	2,0	n.m.	24,7x	14,6x	15,3x	1,2x	1,0x	0,9x	1,0x	14,8x	10,9x	8,5x	7,1x	441,8x
Gansu Qilianshan Cement Group Co Ltd	CHINA	747,8	943,2	n.a.	9,8x	6,8x	5,8x	5,1x	1,4x	1,0x	1,0x	0,9x	9,9x	n.a.	n.a.	n.a.	n.a.
Lucky Cement Ltd	PAKISTAN	1.187,0	1.237,7	9.3	11,2x	11,0x	9,6x	7,3x	1,7x	1,5x	1,4x	n.a.	7,4x	7,0x	7,4x	5,5x	n.a.
Lafarge Holcim	SWITZERLAND	27.948,2	47.346,5	374,0	n.a.	14,9x	12,7x	11,2x	1,8x	1,7x	1,6x	1,5x	9,2x	7,6x	7,1x	6,6x	126,6x
UltraTech Cement	INDIA	13.524,5	15.564,3	93,0	n.m.	34,4x	25,2x	20,2x	3,8x	3,0x	2,6x	2,3x	20,5x	17,0x	13,4x	11,2x	167,4x
Heidelbergcement	GERMANY	13.612,0	26.742,5	197,0	12,8x	10,2x	8,9x	7,8x	1,4x	1,3x	1,2x	1,2x	8,3x	7,0x	6,4x	5,9x	135,7x
Vulcan Materials	UNITED STATES	13.567,9	16.508,0	185,0	n.m.	25,9x	20,9x	17,3x	4,4x	3,7x	3,4x	3,2x	18,1x	14,6x	12,2x	10,6x	89,2x
Dangote Cement	NIGERIA	9.555,9	10.201,0	10,3	20,9x	14,9x	11,9x	9,6x	4,3x	3,4x	3,1x	2,7x	8,7x	8,0x	6,9x	5,8x	995,2x
			Min		9.8x	6.8x	5.8x	5.1x	0.9x	0.7x	0.7x	0.6x	4.4x	5.8x	4.9x	4.1x	73,3x
			Max		32.8x	38.2x	25.2x	20.2x	4.4x	3.7x	3.4x	3.2x	20.5x	17.0x	13.4x	11.2x	995.2x
			Average		19.3x	18.9x	13.0x	11.8x	2.1x	1.8x	1.7x	1.6x	10.5x	9.2x	8.0x	7.2x	252.1x
			Average (LatAm)		21.6x	19.6x	12.2x	11.4x	2.0x	1.8x	1.7x	1.6x	9.0x	8.4x	7.5x	6.7x	238,3x
			m ex Argentina)		24.7x	18.9x	11.6x	10.8x	2.0x	1.8x	1.7x	1.6x	9.2x	8.0x	F 6.8x	6.1x	270.6x
		Average (Other emerging)		16,8x	19,1x	13,3x	12,0x	2,1x	1,8x	1,6x	1,5x	11,6x	10,2x	8,6x	7,5x	355,1x
			age (Developed)		12,8x	17,0x	14,2x	12,1x	2,5x	2,2x	2,1x	2,0x	11,9x	9,7x	8,6x	7,7x	117,2x

Trading multiples 2018E from 7 LatAm cement companies

Company	Country	Market Cap.	D/E	EBITDA margin	CAGR Sales	P/E	EV/Sales	EV/EBITDA	EV/Installed
Company	Country	iviai ket Cap.	UIE	EBIT DA III ai gili	CAGR Sales	2018E	2018E	2018E	capacity
Holcim Argentina SA	ARGENTINA	465,8	-0,1	23,5%	8,0%	14,3x	1,3x	9,6x	130,9x
CEMEX Latam Holdings SA	COLOMBIA	863,3	0,0	22,3%	1,9%	9,1x	0,7x	5,8x	111,3x
Cementos Argos SA	COLOMBIA	2.912,4	0,8	16,7%	3,3%	38,2x	1,9x	10,2x	235,4x
Elementia SAB de CV	MEXICO	649,9	1,2	17,3%	6,4%	18,0x	1,1x	6,5x	466,7x
Cemex SAB de CV	MEXICO	8.171,6	1,3	18,8%	3,2%	11,0x	1,4x	7,4x	211,0x
Grupo Cementos de Chihuahua SAB de CV	MEXICO	1.894,7	0,2	25,1%	5,0%	22,0x	2,5x	8,7x	n.m.
Cementos Pacasmayo SAA	PERU	880,1	0,3	30,2%	6,9%	15,3x	3,0x	9,4x	144,6x
					Average Adj.	15,2x	1,9x	8,4x	128,9x
					Average	18,3x	1,7x	8,2x	216,7x
					Min.	9,1x	0,7x	5,8x	111,3x
					Max.	38,2x	3,0x	10,2x	466,7x

Trading multiples 2018E from 18 selected global peers adjusted by income tax rate and country risk

Company	2018			Tax rate				Country risk				
	Country	EV/EBITDA	Tax rate country	Tax rate Argentina	Tax rate adjustment	EV/EBITDA adjusted (1)	Implied yield	Country risk country	Country risk Argentina	Country risk adjustment	Implied yield	EV/EBITDA adjusted (2)
Holcim Argentina SA	ARGENTINA	9,6x	34,90%	34,90%	1,0	9,6x	10,4%	5,9%	5,9%	0,0%	10,4%	9,6x
CEMEX Latam Holdings SA	COLOMBIA	5,8x	37,00%	34,90%	0,9	6,1x	16,3%	1,7%	5,9%	4,2%	20,5%	4,9x
Cementos Argos SA	COLOMBIA	10,2x	37,00%	34,90%	0,9	10,8x	9,2%	1,7%	5,9%	4,2%	13,4%	7,4x
Elementia SAB de CV	MEXICO	6,5x	30,00%	34,90%	1,2	5,6x	17,9%	2,6%	5,9%	3,4%	21,2%	4,7x
Cemex SAB de CV	MEXICO	7,4x	30,00%	34,90%	1,2	6,4x	15,7%	2,6%	5,9%	3,4%	19,1%	5,2x
Grupo Cementos de Chihuahua SAB de CV	MEXICO	8,7x	30,00%	34,90%	1,2	7,4x	13,4%	2,6%	5,9%	3,4%	16,8%	6,0x
Cementos Pacasmayo SAA	PERU	9,4x	29,60%	34,90%	1,2	7,9x	12,6%	1,4%	5,9%	4,6%	17,2%	5,8x
Birla Corporation Ltd	INDIA	8,0x	30,00%	34,90%	1,2	6,9x	14,5%	1,5%	5,9%	4,5%	19,0%	5,3x
India Cements Ltd	INDIA	n.a.	30,00%	34,90%	1,2	n.a.	n.a.	1,5%	5,9%	4,5%	n.a.	n.a.
Prism Johnson Ltd	INDIA	10,9x	30,00%	34,90%	1,2	9,4x	10,7%	1,5%	5,9%	4,5%	15,1%	6,6x
Gansu Qilianshan Cement Group Co Ltd	CHINA	n.a.	25,00%	34,90%	1,4	n.a.	n.a.	1,9%	5,9%	4,1%	n.a.	n.a.
Lucky Cement Ltd	PAKISTAN	7,0x	31,00%	34,90%	1,1	6,2x	16,2%	4,3%	5,9%	1,6%	17,8%	5,6x
Lafarge Holcim	SWITZERLAND	7,6x	8,50%	34,90%	4,1	1,8x	54,3%	0,0%	5,9%	5,9%	60,2%	1,7x
UltraTech Cement	INDIA	17,0x	30,00%	34,90%	1,2	14,6x	6,8%	1,5%	5,9%	4,5%	11,3%	8,9x
Heidelbergcement	GERMANY	7,0x	29,79%	34,90%	1,2	5,9x	16,9%	0,0%	5,9%	5,9%	22,8%	4,4x
Vulcan Materials	UNITED STATES	14,6x	21,00%	34,90%	1,7	8,8x	11,4%	0,0%	5,9%	5,9%	17,3%	5,8x
Dangote Cement	NIGERIA	8,0x	30,00%	34,90%	1,2	6,9x	14,5%	6,3%	5,9%	-0,4%	14,1%	7,1x
				Average		7,5x						5,9x

Appendix 9 SWOT analysis

Limestones reserves. Loma has their own strategically located limestone reserves. The existing quarries have enough reserves to support Loma's operations for more than 100 years, based on its 2016 cement production levels

Largest full-scale cement producer.

Loma has the largest installed capacity in Argentina. Once L'amali expansion is completed, it will be the largest and most efficient cement plant in Argentina and Latin America based on installed capacity.

Market leader. Loma is the market leader in Argentina, uniquely positioned to capture increasing demand for cement. The company has 45.4% market share in cement sales volume.

S

Critical exposure to electrical & power expenses.

Electrical power represents up to 10% in the company cost structure. Loma has high electrical needs, and Argentina also has several technical operating limits, due to the lack of investment in the system during the last 15 years.

Lower demand. The demand for cement is dependent on the level of construction activity, which was negatively affected by the reforms implemented during 2016 as part of the economic and political transition.

Following this scenario, cement sales in 2016 decreased 10.7% year-on-year, affected by a 12.6% year-on-year contraction in the Argentina's construction sector index

W

Decreased margins.

Inflationary pressure and devaluation are factors that negatively affect the Loma's margins, given the impossibility of passing on the effect of these events to their prices.

Pro-business environment.

The measures taken by the Macri administration has been seen promarket.

In case of winning the 2019 elections, policies will have 4 more years of continuity. benefiting companies like Loma.



Emerging markets.

There is an expected international capital rotation towards Emerging Markets (with positively impact on its ADR).

Infraestructure investment. Loma will be benefited from several projects in key areas for infrastructure investment as: PPP, Belgrano Plan and railway expansion.

GDP contraction. A GDP contraction projected for the two years in Argental projected.

A GDP contraction is projected for the next two years in Argentina, therefore a decrease in cement consumption is expected due to the high correlation between these two factors.

Shareholders legal demand.

The company has a lawsuit in force before the SEC, made by a group of Wall St. investors. The demand is based on the fact that, at the time of the IPO, Loma did not fully report the Risks of investing in Argentina.

Public cartelization.

Loma and the rest of national cement companies were accused by the local government for industry cartelization. After consecutive months with price increases in cement, the Argentine government initiated an investigation in the industry, that today remains in "information requirement" status.

Appendix 10 Porter analysis

Industry rivalry. The main actors in Argentina's cement industry are: Loma Negra, Holcim, Cementos Avellaneda and, in smaller volume, PCR. Among all of them, they have 17 plants that explain almost the entire national production. Cement plants are generally located adjacent to large limestone quarries, so proximity to the source of raw materials, particularly limestone, reduce the production costs by shortening the distance to the plant.

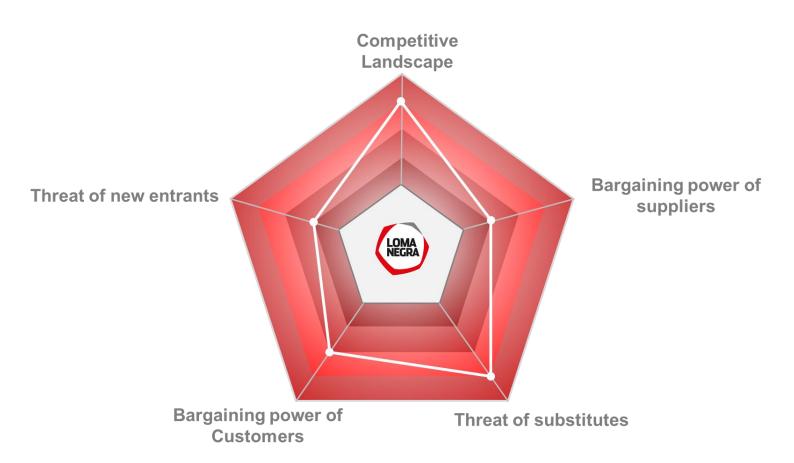
Each company has consolidated its regional presence, being Loma the only one with national reach. This is partly due to the physical proximity of their plants to the limestone reserves. In this context, Loma has the highest installed capacity in the country, doubling the second in the ranking, Holcim.

The threat of new entrants. The industry has high barriers to entry because of the capital-intensive nature of the production process (costly and complex to build plants), the substantial amount of time required to build a new plant, the challenges in accessing raw materials, obtaining mining concessions and the challenge of environmental permits. As an energy intensive industry, a large amount of energy obtained from burning gas, petcoke or other fuel sources is needed in order to heat the kilns used in the production of clinker.

Bargaining power of customers. Due to its nature as a leader in the Argentine market, given its significant volume of production, and the extensive national scope, it has a great capacity for negotiation with its clients. The company has always been the first to adapt the offer to the new market conditions. The closeness with its customers gives an important competitive advantage over its competitors. A low-price elasticity is shown in the market driven by the absence of competitive substitute products and relatively low contribution of cement to the overall construction costs. Demand for cement is dependent on levels construction activity and infrastructure spending, which are highly correlated to the macroeconomic environment.

Threat of substitutes. Loma's products are essential for the construction industry. Its different lines of business offer a comprehensive solution to the needs of the industry. Due to the negative environmental impact of cement, fly ash is positioned as a likely substitute for concrete manufacturing. Although the Argentine industry is still far from its integration in the value chain, it could become a threat in the long term, as the sector's technologies advance.

Bargaining power of suppliers. Loma owns six cement plants fully integrated into the value chain. It has also the major installed capacity in Argentina and owns a railway concession. These features allow Loma to control the whole value offer from their own limestone reserves almost to the final customer.



Appendix 11 Cement production process

LOMA set forth the standard phases of the cement production process, which consists of the following main stages: extraction and transportation of limestone from the quarry; grinding and homogenization to make the raw meal of consistent quality; clinkerization; cement grinding; storage in silos; and packaging, loading and distribution.

Mining. The extraction process of the principal raw materials (limestone and clay). Naturally occurring calcareous deposits such as limestone, marl or chalk provide calcium carbonate and are extracted from quarries, often located close to the cement plant. In the pre-operational phase, the extraction process begins with mining research and probing to identify the quality and quantity of limestone ore. Once economic feasibility is established, we begin planning the mining work to define final digging configuration as well as the size of the fleet of vehicles and equipment needed for the operation. In the operational phase, the blocs are marked and the holes are made by punch presses. The holes are then loaded with explosives and detonated to obtain fragmented material, which is then transported to the crushing system to reduce the granulation level. Clay extraction does not normally require explosives.

Transportation. Limestone is loaded by large blades on dump trucks, and carried to the crushing plant.

Primary crushing. The primary crusher converts the rocks into small stones.

Pre-homogenization of the limestone and clay. Approximately 90% of the limestone is stored in a park, where the first homogenization of the chemical composition of the stone is achieved. At the crusher, the limestone rocks are reduced to fragments measuring approximately 10 centimeters. This crushed limestone is then transported to the cement plant by truck or conveyor belt. Clay is also transported by truck to the plants. At the clinker plant, crushed limestone is blended by reducing the variations in chemical properties in order to obtain a homogenized mixture of limestone and clay.

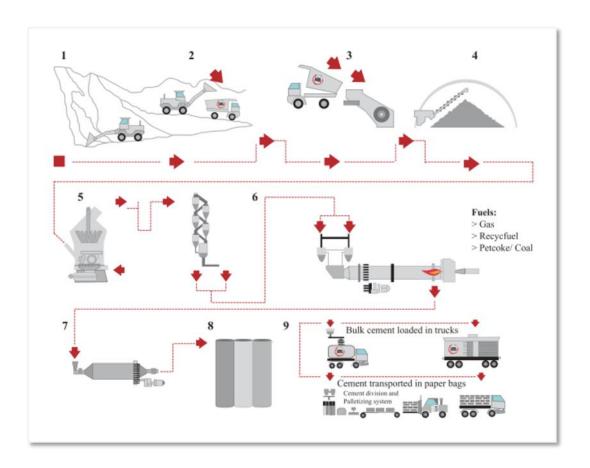
Grinding and homogenization ("raw meal" production). The crushed pieces are then milled together to produce a powder called "raw meal." Subsequently, the raw meal is sent to a blending silo and then to a storage silo from where it is fed into the pre-heater.

Burning of raw meal to produce clinker ("clinkerization"). A pre-heater is a series of vertical cyclones through which the raw meal is passed. In these cyclones, thermal energy is recovered from the hot flue gases and the raw meal is preheated before it enters the kiln, so the necessary chemical reactions occur faster and more efficiently. Calcination is the decomposition of limestone to lime. Part of the reaction takes place in the "pre-calciner" and part in the kiln. Here, the chemical decomposition of limestone typically emits 65% of total emissions. The pre-calcined meal then enters the kiln. Fuel is fired directly into the kiln to reach temperatures of up to 1,450 degrees Celsius. The intense heat causes chemical and physical reactions that partially melt the meal to form a mixture of calcium silicates and other silicates, which is called "clinker."

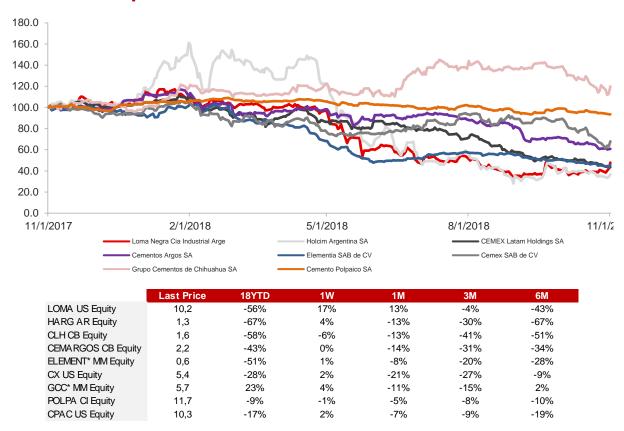
Cooling and final milling of clinker to produce cement. From the kiln, the hot clinker falls onto a grate cooler where it is cooled to a temperature of approximately 200 degrees Celsius by incoming combustion air. A typical cement plant will have clinker storage between clinker production and grinding. Traditionally, ball mills have been used for grinding, although more efficient technologies like roller presses and vertical mills are used in many modern plants today. In this form, cement reacts as a binding agent that, when mixed with water, sand, stone and other aggregates, is transformed into concrete or mortar.

Storing in the cement silo. The final product is homogenized and stored in cement silos and dispatched from there to either a packing station (for bagged cement) or to a silo truck. Most of our product is sold in paper bags, which are generated through an industry standard automatic bagging process.

Cement dispatch. Cement is dispatched in bulk or in paper bags sacked on pallets.



Appendix 12 Stock performance vs. Peer



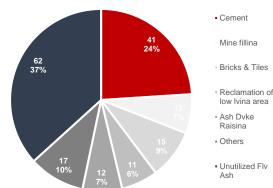
Appendix 13 Pollution | India case: Using fly ash in concrete

The combustion of powdered coal in thermal power plants produces fly ash. The high temperature of burning coal turns the clay minerals present in the coal powder into fused fine particles mainly comprising of aluminum silicate. When pulverized coal is burnt to generate heat, the residue contains 80% fly ash and 20% bottom ash.

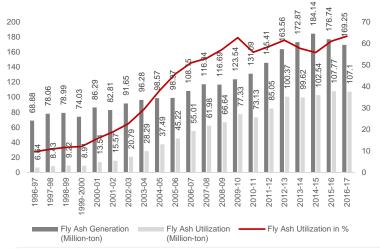
In India 70% of the electricity generated is from coal based thermal plants and this is not going to change in the near future. So, in the coming decades the generation of fly-ash will increase tremendously and the consumption rate should be increased gradually to maintain a production-consumption balance.

Fly ash is being used by cement Industry as a pozzolanic material in manufacturing of Portland cement. It saves both precious lime stone and coal. The utilization of fly ash in manufacturing of cement is highly value added use. Owing to its pozzolanic properties fly-ash is used as a replacement for some of the Portland cement content of concrete.

Quantity of Fly Ash Utilized in the mode of utilization 2017, In tons and %







Fly Ash Generation and Utilization for 2016-17							
Number of Thermal Power Stations	155,00						
Installed Capacity (MW)	157.377,00						
Coal Consumed (Million tons)	509,46						
Fly Ash Generation (Million tons)	169,25						
Fly Ash Utilization (Million tons)	107,10						
Percentage Utilization	63,28						
Percentage Average Ash Content (%)	33,22						

Impact on LOMA Moderate

The use of fly ash is increasing annually in Europe and Asia countries. In Argentine industry, it has not yet been added since the energy matrix is totally different, and is not based on coal exploitation. In the long term, it could become a possible substitute for Cement, fitting into the global trend and taking advantage of its ecological features; given the high level of industry pollution today

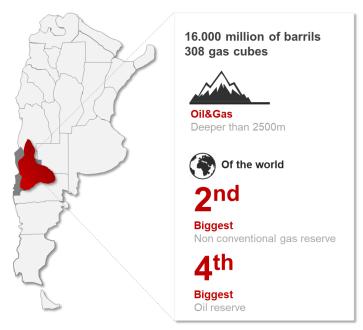
Appendix 14 Vaca Muerta

The Argentine energy industry went through significant changes in the last 30 years. Until the mid-2000s, Argentina generated significant surplus natural gas production, exported by 11 international pipelines to Chile, Uruguay and Brazil. However, the public policies that prevailed at the outcome of the 2001/2002 economic crisis, characterized by increasing governmental interventionism, eventually led to a sharp decline in domestic oil and gas reserves and production, and transformed the country into a net gas and hydrocarbons importer. This commercial deficit has caused significant fiscal costs and macroeconomic impacts, including a recurrent erosion of the country's foreign currency reserves.

After a decade of declining conventional production, the discovery and/or increasing awareness of significant unconventional oil and gas resource potential coupled with government market-friendly policies, has led to considerable interest in these resources. Vaca Muerta, located in the Neuquen basin, is the main non-conventional hydrocarbon formation in Argentina. Vaca Muerta occupies an area of 36,000 km2, somewhat smaller than the territory of Switzerland or the Netherlands. Resources are estimated at 16 billion barrels of oil and 308 trillion cubic feet of gas, which means that, if exploited, the proven reserves of the country would increase more than eight times, securing for the next 150 years our gas consumption and 85 years for oil consumption.

Vaca Muerta's current production of about 160,000 barrels of oil equivalent a day could grow to almost 900,000 boe/d by 2024 if the country can attract \$4bn of investment a year, according to consultancy Wood Mackenzie.

Vaca Muerta train project. A four-year project under public-private partnership (PPP) is going to be launched in the coming months to link towns in the heart of the Patagonian shale field to the Atlantic port of Bahia Blanca more than 400 miles away. The railway will have capacity to transport around 4 million tons per year of frack sand.



Vaca Muerta Infrastructure and Logistics Requirements for Unconventional Oil and Gas Development - 2030 Estimate

Main Supplies and Services

Water: 11.2 Million m3

Proppant: 7.5 million tonnes (150 x 10 bags)

Pipes (for drilling tasks): 12,300 km and

633,000 tonnes

Cement concrete: 1.5 million tonnes

Fracking power: 580,000 HP

Transport (number of trucks)

- 100% by vehicles 4,900
- Combined with aqueducts 2,700
- With aqueducts plus railroad 800

Infrastructure (Excl. Gas Pipelines)

Aqueducts

- Highly recommended
- Neuquen "Red Azul" (Blue Network) project, paralyzed

Roads

 Need for new construction and rehabilitation ofexisting roads

Railroads:

- New railroad line Neuquen Añelo (100km)
- Rehabilitation of load transport line B.

Blanca - Neuquen (570 km)

Infrastructure (Excl. Gas Pipelines)

Oil Camps

- Large scale catering
- Maintenance
- Storage

Añelo (Neuquen town, closest to field operations)

- Large scale housing/ hotel capacity expansion
- Pubic services
- Sundry general services

Short-term impact on LOMA Low

Argentina has a very high potential for the development of unconventional hydrocarbons, as it ranks fourth as a country with 27 billion barrels or 8% of the world market of unconventional oil deposits; and is second with 802 trillion cubic feet in gas resources with 11% of this kind in the world.

The Argentine government has taken important steps toward creating an environment that encourages investment in Vaca Muerta. But to reach all its potential is necessary a lot of investment in infrastructure developments to gain international attraction and competitiveness.

Although we recognize that Vaca Muerta will be beneficial for the development of the province of Neuquen and some cities due to the investments that the basin will attract, we do not see a large upside potential for LOMA as the major investments will be focus on pipeline extension, property and equipment and aqueducts.

Appendix 15 Long-term Infrastructure Plan.

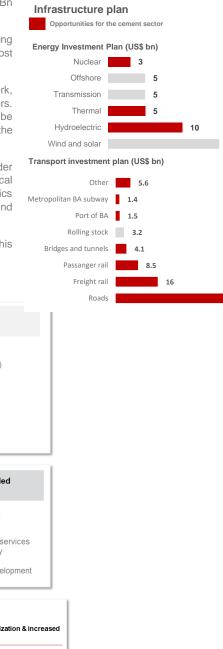
The current administration has identified investment opportunities for approximately USD 240 Bn across multiple sectors, both at federal and provincial levels.

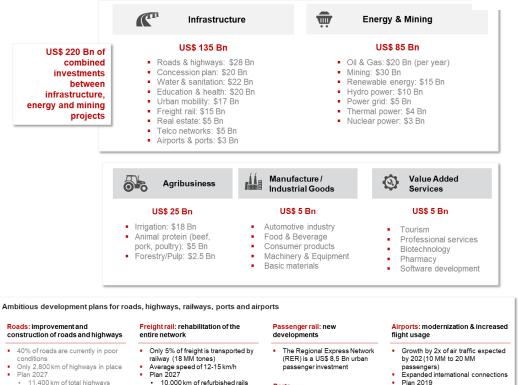
For the current government the implementation of this national infrastructure plan has been among its main priorities. In spite of the recent turmoil, the government still aim to compensate for almost twenty years of low investment and the subsequent deterioration of core infrastructure assets.

The main projects of this program include doubling the size of the national highway network, upgrading existing airports and ports, and the expansion of the rail network, among others. Furthermore, the Secretariat of Energy launched a program of USD 36 Bn in the power sector to be completed by 2025, with the aim of alleviating the energy shortfall and reduce the participation of the thermal sources in energy matrix.

In addition, the government approved in February 2017 the Public-Private Partnership law in order to attract new investments. The projects to be done under this scheme include railroads, electrical transmission, hospitals, penitentiaries, water, sanitation, public lighting, bridges, and logistics contracts. Overall, the PPP regime is expected to attract estimated investment bids totaling around USD 26 Bn.

On June 18, the first six road projects under PPP scheme were awarded by five consortiums. This first process is expected to bring around USD 6 billion of investment in the next four years.





80-100 MM tones transported

Investment of US\$ 15 Bn

Short-term impact on LOMA Moderate

13,000 km of road in good

conditions
Investment of US\$ 28 Bn

Budget deficit, high inflation, high interest rates and high dependence on foreign investors to maintain calm the exchange rate are some of the problems that Argentina has to sort out in order to attract investments and reduce its infrastructure deficit. Furthermore, as part of the IMF stand-by agreement, the government pledged to reduce public works spending in order to reach primary balance in 2019.

Port of City of Buenos Aires bid

14 airports modernized by 2019

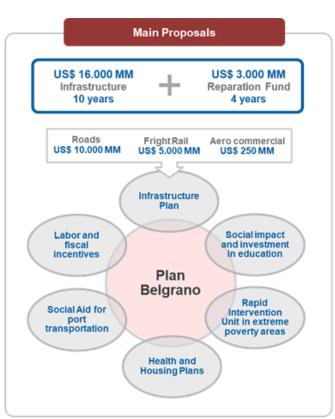
Investment of US\$ 900 MM

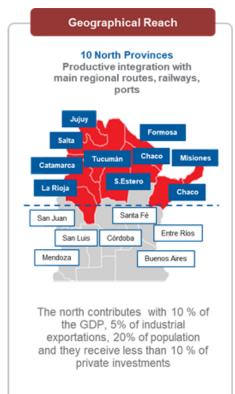
Although the government is banking on the new PPP program to maintain infrastructure investment, the companies has been having difficulties in reaching the financial close for the first 6 roads awarded under this scheme as the main local and international banks still have some concerns about the program. In a summary we consider the biggest challenge for Argentina to boost infrastructure is rebuilding investor confidence in the country.

Appendix 16 The Belgrano Plan

The "Belgrano Plan" is an infrastructure plan for ten northern Argentine provinces, announced in 2015 by the current administration. The plan includes USD 16 billion of investment within 10 years. The projects cover the provinces of Salta, Jujuy, Tucuman, La Rioja, Catamarca, Misiones, Corrientes, Chaco, Formosa and Santiago del Estero.







Short-term impact on LOMA Moderate

Since its inception the Belgrano Plan has been advancing in a relative slow pace due to many factors, including political concerns and budget restrictions. As we do not see a clearer outlook for the acceleration of the program, we think that in the short/mid-term this ambitious plan will have a moderate impact on LOMA.

Appendix 17 Renewable Energy

The Government of Argentina, under Law No. 26,190 and Law No. 27,191, decided to promote the use of renewable energies in electricity generation, through the following initiatives:

- Creation of RenovAr program (the "Program"), including regular public tender offers
- Signing of long-term USD denominated PPAs
- Implementation of CAMMESA as the administrator and off-taker of these agreements

The Program created a mandate that 20% of installed capacity come from renewable energy sources by 2025, requiring an estimated investment of USD 13.8 Bn and 10 GW of additional generation capacity

Over the last two years, the Government has successfully held three tendering processes (RenovAr Round 1, Round 1.5 and Round 2) in order to increase the renewable base, awarding PPAs for ~5 GW of new generation

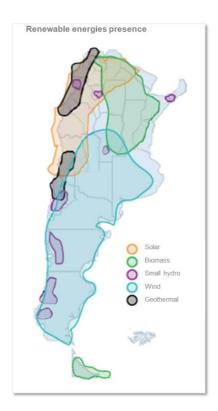
The first bidding process under the Program, RenovAr Round 1, was carried out by the Ministry of Energy and Mining in September 2016, and was a remarkable success, with 1,142 MW awarded through 29 projects

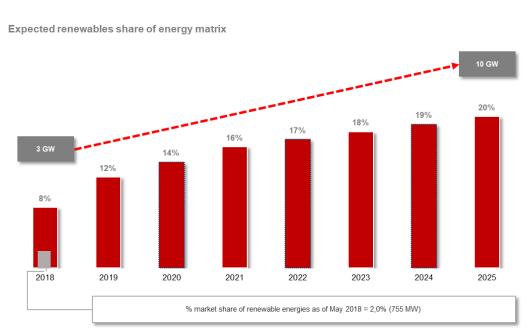
The success of RenovAr Round 1.0 led MINEM to launch Round 1.5 at the end of 2016; and 30 additional projects, totaling 1,282 MW, were awarded PPAs

RenovAr Round 2.0 was launched in August 2017 and MINEM awarded 88 projects, totaling 2,043 MW of solar, wind, biomass, biogas and small hydro capacity

RenovAr auctions have an attractive regulatory framework, including long term USD denominated PPAs, World Bank and FODER1 guarantees (in some cases) and tax incentives.

On September 6, 2018 the Undersecretariat of Renewable Energy announced a 400 MW Round 3 of the RenovAr program, which is estimated to be launched before 2018YE.





Short-term impact on LOMA Moderate

Renewable energy is an increasing trend in Argentina and overseas. Loma has signed a 20-years contract with Genneia S.A. to enhance the use of green energy. This action will have two main consequences in Loma's operation: 1. Significantly reduces its energetic expenses by replacing natural mineral resources and fossil fuels such as coal and gas. 2. Contribute to the environment and communities where the company has their operations.

Appendix 18 IMF Agreement

External and domestic factors have served to erode market confidence, causing sovereign spreads to rise to almost 800bps in early September amid increasing pressures on the currency. With the government unable to issue new FX debt in sufficient volumes and with FX intervention exceeding limits agreed in the Stand-By Arrangement, international reserves have been depleted at a much faster pace than was anticipated under the program (at end-September, net international reserves were US\$6.7 billion below the program floor).

In the last week of August, President Macri publicly announced that he had reached agreement with the Fund to bring forward program resources to fund the government's fiscal needs in 2018-19. The uncertainty surrounding the announcement amplified the volatility of the peso (which had already been on a depreciating trend), leading the currency to depreciate by 8 percent vis-à-vis the U.S. dollar on the day of the announcement. On the following day, despite a 1500 bps increase in the policy interest rate, a 5-percentage point increase in reserve requirements, and the sale of US\$330 million in FX reserves, the currency fell another 11 percent.

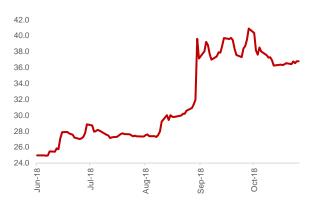
Bond spreads moved dramatically higher, with the 1-year CDS spread rising from 499 bps before the announcement to 798 bps by the end of that week. During August, the peso depreciated by 26 percent versus the U.S. dollar.

On September 3, with market pressures continuing, President Macri announced an overhaul of his cabinet and a further tightening of fiscal policy targeting primary balance in 2019. The adjustment was to be underpinned by an increase in export taxes, cuts to capital spending, and reductions in subsidies and other spending. In thin markets, the exchange rate depreciated 4.3 percent on September 3 and the central bank sold US\$100 million at the end of the trading day. Ongoing FX sales by the central bank did not arrest the continued depreciation of the peso during the rest of September, with the exchange rate peaking above 41 pesos to the dollar on September 28.

As the September maturity date for LEBACs approached, both resident and nonresident investors appeared to be moving from peso to FX-denominated assets, even as Argentine bonds rallied. To stabilize markets ahead of the September 19 LEBAC maturity, the central bank announced it would (i) rollover only half (AR\$150 billion) of the maturing LEBACs held by nonbanks; (ii) raise remunerated reserve requirements by 5 percent; and (iii) be ready to auction FX to counter disorderly market conditions. In the following 5 days, the central bank sold US\$0.6 billion in foreign currency as the exchange rate modestly appreciated. In advance of the October maturity of LEBACs, the central bank announced a further 3 percent increase in remunerated reserve requirements. in the context of an appreciating peso and higher interest rates, the October 17 LEBAC maturity was met with stable conditions in monetary and exchange rate markets.

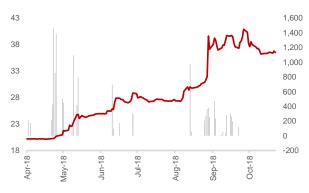
Despite worsening financing conditions, the authorities continue to issue debt in domestic markets. Since June, the federal government has placed US\$17 billion in domestic law debt (Annex I). Private sector rollovers of FX debt reached low levels in June-August, driven by the exit of non-resident holders. During those months, only about 40 percent of the new issuance of FX bonds was purchased by private sector holders. Higher interest rates have attracted stronger private sector demand in both September auctions (with an average 70 percent rollover rate). Around US\$5.3 billion in short term peso bonds were issued in August and September, with yields in excess of 50 percent for 3- to 6-month maturities.

Exchange Rate (AR\$/US\$)





BCRA FX intervention and Price



The large and rapid depreciation of the peso has caused inflation and inflation expectations to depart from program targets. With medium-term inflation expectations now well outside the program's inflation consultation clause outer band through end-2020, the strength of the nominal anchor provided by the inflation targeting regime has been undermined.

Policy changes

- Submitting a 2019 Budget with a zero-primary deficit target, backed by an agreement between the government and provincial leaders to support the government's policy program.
- Adopting a simpler, stronger, and verifiable monetary policy framework that decisively lowers inflation and inflation expectations. To this end, the inflation targeting framework has been replaced by a monthly target on the growth of base money.
- Allowing the exchange rate to float freely. The authorities will undertake rules-based FX intervention only in limited, pre-specified circumstances to prevent a significant overshooting of the peso. All such FX intervention, if it occurs, will be unsterilized.
- Agreeing an increase in budget support from other IFIs and seeking to increase the swap line with the People's Bank of China (by US\$9 billion).
- Increasing the level of social assistance benefits in the main safety net programs.

Impact on LOMA Moderate

The IMF agreement has a great impact on Loma since one of the most important demands of the program is to achieve the primary fiscal deficit. In order to reach the goals, the Government has cut-off budget for public works, which means a significant reduction in cement consumption.

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