

Global  
Construction

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A global forecast  
for the construction  
industry to 2030



# Global Construction

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A global forecast  
for the construction  
industry to 2030

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## Foreword

If there is a dominant take away from Global Construction 2030 it is that construction is likely to be one of the most dynamic industrial sectors over the next fifteen years, crucial to the evolution of prosperous societies around the world.

The numbers are huge: the global market is forecast to grow 85% to \$17.5 trillion, accounting for almost 15% of world output by 2030. That not only means the industry will create untold numbers of jobs and create significant wealth for its stakeholders, but also that in many countries the sector will, literally, drive economic growth. Overall, construction activity is expected to grow by an average of 3.9% per year, more than a percentage point faster than GDP.

Of course, performance will vary across regions and countries. Some readers of this report might be surprised by a few of its headline forecasts:

- The US construction market is expected to grow by an average 5% per year through 2030, with especially rapid growth in the next few years.
- India will likely be the most rapidly growing market, almost twice as fast as China, and passing Japan to become the third largest in global rankings.
- Mexico is forecast to replace Brazil as the largest Latin American construction market, while Colombia is expected to almost double in size by 2030.
- While Europe in general is likely to be consigned to lackluster growth, the United Kingdom will be an important exception. The UK market is on course to become the sixth largest in the world, and to replace Germany as the largest European market.
- Taken together, the ASEAN countries could be a \$1 trillion market by 2030, driven by growth of 6% or more in countries like Indonesia, Vietnam and Myanmar.

While CEMEX does not operate in all these markets, we—and other global construction, cement and building materials companies—will both benefit from and contribute to this outsized performance.

In that spirit, I am delighted that we are the Lead Global Sponsor of this fourth in a series of global studies about the future of the construction and engineering industries. The authors have made an important contribution to understanding the dynamics, prospects and challenges facing our industry through 2030.

**Fernando A. González**  
Chief Executive Officer  
CEMEX

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# Global Construction 2030 – Executive Summary

Global Construction 2030 is the fourth in a series of major global studies of the construction and engineering industry published by Global Construction Perspectives and Oxford Economics.

Global Construction 2030 is sponsored by prominent global business leaders in the construction and engineering industry from North America, Latin America, Europe, MENA and Asia Pacific, with the purpose of understanding the global construction and engineering market and the forces shaping future demand to 2030.

In Global Construction 2030 we give an overview of the health of the global economy and explain how key drivers, including growth in economic output, rising populations and rapid urbanisation in emerging markets are expected to impact growth in key construction markets.

Global Construction 2030 is aimed at business leaders, policy makers and others with a special interest in helping to shape the future of the global construction and engineering industry. Others, including financial institutions and aspiring leaders of the future, will find much of interest in the Global Construction 2030 forecast and report which includes considerable data, information, analysis and insight into global trends as well as individual forecasts for all major construction markets globally.

More detailed forecasts and analysis of key construction markets are presented in the main Global Construction 2030 report (452 pages, 640 figures and tables) as well as in over 50 separate databases that provide consistent annual data over a 25 year period from 2005 to 2030 for all major global construction markets.

Key thought leadership boxes are included throughout the Global Construction 2030 report, written by leading global experts. Each of ten separate boxes examines far-ranging global themes that we believe will have a major impact on the future direction of the sector. These topics include how China will drive unimaginable investment and spending to build a modern-day Silk Road to connect its economy by land and sea with over 60 countries. In addition, we examine how China will use public-private partnerships to help fund its own significant domestic infrastructure programs. We also look at how the wealth of built assets across the world varies and how policy makers shape policy towards infrastructure. We also look at how funding and financing of infrastructure, used to build global mega cities of the future, will evolve and we examine the key bottlenecks for reform within the Indian economy and how India is emerging as a key global growth engine for construction in emerging markets.

We also, ourselves, look at key far-ranging issues, including how differing monetary policies promulgated by central banks will affect growth across regional markets and how global currency movements affect competitiveness for construction. We look at stagnation in productivity and how an industry-wide global 'technology fix' could boost flagging levels of productivity and provide answers to global skills shortages. We also examine how urbanisation across the African continent will shift the ranking of Africa's Top 20 cities and consider how different types of construction could be dominant in clusters of different types of cities across Africa. Finally, we give a state-by-state view of growth for construction across the US, showing how growth is tilting to the south, and we give a state-by-state forecast of growth in house prices to 2030.

## China, US and India Drive Global Construction Growth to 2030 – India climbs up global rankings, overtaking Japan

China, US and India will account for 57% of all global growth in the construction and engineering market by 2030 – underpinning the future economic development of the three countries that account for over a third of the world's population and economic output.

*“Top three nations – China, US and India – account for 57% of global growth in construction to 2030”*

The top three nations – China, US and India – will add over US\$4.5 trillion to global construction growth.

*“Top three nations add \$4.5 trillion to global construction growth to 2030”*

Eight global construction markets (China, US, India, Indonesia, UK, Mexico, Canada and Nigeria – ranks in order of contribution to global growth) will account for 70% of all global growth in construction to 2030.

*“Eight nations account for 70% of global growth”*

Interestingly, this is the first time we have seen the UK feature in our Global Construction Perspectives/Oxford Economics global construction growth rankings. This is not surprising as the UK has huge infrastructure and housing deficits, following decades of underinvestment, and the UK government is determined to move forward with a number of global mega projects that will be a game changer for the UK economy.

*“UK makes Global Construction Perspectives/Oxford Economics global rankings for growth in construction for first time, due to decades of underinvestment”*

It is also the first time we have seen Nigeria feature in our global growth rankings, but Nigeria is set to undergo significant population growth over the period to 2030, when Nigeria's population will exceed that of the US and will become the fifth most populous country in the world. Lagos will be the largest city in Africa by 2030, measured by its GDP, overtaking Johannesburg and Cairo. Lagos will emerge as a global mega city.

The global construction market is set to grow by US\$8 trillion by 2030, reaching a total size of \$US17.5 trillion, up by 85% and growing by an average annual rate of 3.9% to 2030.

*“Growth in global construction up \$8 trillion, growing by 85% to 2030”*

Cumulative volume of construction will reach US\$212 trillion over the period to 2030, with US\$77.8 trillion in Emerging Asia.

*“Spending up US\$212 trillion globally on construction and engineering projects by 2030”*

We estimate that by 2030, construction will account for 14.7% of global GDP, up from 12.4% in 2014.

*“Construction to account for 14.7% of global GDP in 2030”*

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The New 2 World Trade Centre. Scheduled to complete by 2021 it will stand at over 410 metres tall consisting of 81 stories and 260,000 sq. m of rental space while the stacking creates 3,530 sq. m of outdoor terraces with unprecedented views of the surrounding cityscape





**GENSLER/RLB: Shanghai Tower** 上海中心大厦, a megatall skyscraper in Pudong, Shanghai, currently the tallest building in China, at 632m, and the second tallest in the world



Behind our global growth forecasts are a number of key trends, which we set out in detail within our Global Construction 2030 report, bringing together the key drivers, including the need for nations to find alternative ways to fund infrastructure, other than by public funding. Key analysis, forecast trends and insights provide a comprehensive analysis of global construction prospects to 2030 (452 pages, 648 figures and tables), underpinned by key global experts in the construction and engineering sector.

*“Infrastructure funding is key issue for growth in developed and emerging markets. Legacy funding models broken with PPP models to gain significant global traction”*

China will account for almost a quarter of global construction activity by 2030, but this is only up marginally from today's levels. China's economy is currently transforming itself into a consumer and services led economic growth story, whilst its population is also ageing fast. The reversal of China's controversial one-child policy will support longer-term growth, as our forecasts indicate. As a result of China's transformation to a newly industrialised nation, its domestic construction market is set to experience historically low levels of growth, with housing slumping this year to record a first ever decline, before recovery is driven by a new, wealthier consumer class.

*“China construction output to fall further in short term, to historic lows, before recovery driven by a new consumer class”*

The US construction market will grow by an average 5.0% per annum, at a faster pace than China over the period to 2030, which we forecast will grow by an average of 4.6% pa. The US construction market is experiencing a strong cyclical upturn to 2020, especially in the housing sector and partly driven by the large falls in housing seen during the global financial crisis. “US construction grows by average 5.0% pa to 2030, faster than China over long-term”

The discovery and drilling for shale gas and oil in North America, combined with the differing monetary policies driven by central banks, have caused the huge global imbalances across key economies seen during the global financial crisis to swing back towards a more balanced growth pattern.

*“Developed countries, particularly the US, become driver of global construction output, re-balancing growth”*

## US Construction Growth Outperforms

The rise of US construction is driven by a strong cyclical rebound in the near term, with solid growth prospects beyond to 2030, with a strong boost to housing. As of 2014, construction was still down 20% below pre-crisis levels, even though the economy and GDP regained its pre-crisis level in 2011. This is exaggerated in the US housing market, with housing output still 35% below trend levels, and still under half of pre-crisis peak levels. Housing is set to achieve double-digit rates of growth through the short-term, with US housing set to be the fourth fastest growing housing market in the world to 2030 (only India, Myanmar and Vietnam are expected to grow more rapidly).

*“Strong catch-up potential to drive rebound in US construction, with short-term double-digit growth in housing”*

*“US housing market to grow at fourth fastest rate of growth globally, behind India, Myanmar and Vietnam”*

The analysis set out in our Global Construction 2030 report looks carefully state by state at future growth prospects for construction to 2030, emphasising how growth will tilt towards the south within the US, driven by migration from Latin America, as well as greater catch up potential.

In California and Florida, the housing crash saw construction output fall precipitously. The rebound to date has been slight with construction

activity in Florida remaining at less than half its 2006 level, with the picture only marginally better in California. With the recovery underway and incomes starting to rise, the potential for large and rapid rebounds in construction, particularly in housing, are great.

*“Construction in Florida remains under 50% of 2006 levels”*

The wider New York metro area is set to exhibit the strongest construction growth of the major metropolitan areas in the US, partly driven by the huge task of upgrading infrastructure. With much of the city's infrastructure built over 100 years ago, the need for significant investment is great.

In 2030, New York, Houston, LA and Chicago metro areas will represent almost 20% of all construction activity in the US.

*“New York, Houston, LA and Chicago to represent 20% of US construction output by 2030”*

Our Global Construction 2030 forecasts also look at how house prices will grow in the US and we provide a state-by-state analysis of longer-term growth rates in house prices. The average price of a house in the US will climb by 75% to reach US\$308,000 by 2030.

*“Average US house price to reach \$308,000 by 2030, growing by 75%”*

The non-housing sector in the US is supported by strong competitiveness, despite the near-term drag of the strong US dollar. Re-shoring of manufacturing activity is set to continue, and it is widely expected that it will be cheaper to manufacture in the US than China within the next three years (it is already cheaper today to manufacture in Mexico, than in China).

*“US competitiveness drives re-shoring of manufacturing. Cheaper to manufacture in the US than China in near term”*

A significant volume of infrastructure in the US needs replacing, repairing and/or modernising, with calls from the American Society of Civil Engineers, a respected organisation, saying that US\$3.6 trillion needs to be spent improving US infrastructure by 2020. Without a significant drive to improve public-private partnerships (PPP), investment in US infrastructure won't be enough, as existing publicly funded legacy funding models are largely broken, and do not support wider growth in infrastructure, which in our opinion is necessary to support growing population and economic prosperity in the US.

*“US to spend US\$30.0 trillion on construction cumulatively by 2030”*

## Construction Growth Set to Support New Consumer Class in China to 2030, as one-child policy abolished

China's growth slowdown has dominated the headlines and has been the defining economic narrative of the global economy.

China will remain the largest construction market in the world and China's contribution to the global construction growth story remains strong. China will add US\$2.1 trillion to global construction output by 2030, from the total US\$8 trillion that we forecast globally by 2030.

*“China's construction market to grow by US\$2.1 trillion by 2030”*

Maturing industrial sectors, including construction, steel making, cement production and other industrial sectors, making up 30% of China's wider economy, are searching for new end-markets, looking to support growth and to soak up excess capacity. The recent press coverage of the steel sector is one example.



Other structural changes are helping to re-shape China, some more rapidly than others, which will in turn reshape China's construction sector. In the past, China has been heavily focused on industrialising its economy. In the future, China is developing a new consumer class of one billion new global consumers. The expected growth in consumer goods and services means that China's economy is expected to rival the US economy by 2030 in fixed 2014 prices, but in current prices China becomes the world's largest economy by 2028.

One of the most important, yet sometimes overlooked issues on China, compared to the dynamics of India and ASEAN countries, is the lack of any sizeable population growth, combined with a rapidly ageing population. India will overtake China as the most populous country by 2022 whilst China's population is ageing at a remarkable rate, due to the controversial one-child policy, which was eased in 2013 and recently abolished entirely by the Chinese government. The share of persons aged over 65 will accelerate rapidly to near 20% by 2030, rivalling that of some developed nations, and the growth in the number of over 65s will account for more than 100% of the total increase in the population. The abolition of China's one-child policy will also mean that growth could accelerate at the end of our forecast period, with potentially an increasing share of population entering the labour force.

*“Working age population is declining, as growth in the numbers of over 65s in China exceeds total growth in population to 2030”*

These changes will mean significant growth in China, in areas such as building modern healthcare facilities, with tens of thousands of hospitals and medical facilities needing to be upgraded, whilst new city and regional hospitals will need to be built to cope with an ageing population.

In addition, as local governments in China have incurred colossal debts funding infrastructure projects, a revised budget law has imposed restrictions on borrowing using local government financing vehicles and a debt cap has been introduced.

This means that China has recently announced two 'game-changing' initiatives to keep China building.

The first 'game-changer' is to introduce new PPP regulations, allowing private investment in China's vast domestic infrastructure market. Recently, China's Ministry of Finance and the National Development and Reform Commission announced 1,043 PPP projects totalling RMB1.97 trillion (US\$317.8bn). China's rising interest in PPP is covered in greater detail in our Global Construction 2030 report, written by experts in PPP in Hong Kong and Beijing, at international law firm Pinsent Masons.

A much more significant announcement, first made in 2013, now being implemented, is China's 'one-belt, one-road' policy, or China Silk Road, which represents China's third opening up onto the world stage. The second was China joining the World Trade Organisation in December 2001, whilst China's first opening up goes back several decades.

China's ambitious Silk Road project will drive unimaginable investment and spending on infrastructure, building a modern day Silk Road, connecting its new consumer class of over one billion global consumers with over 60 separate economies, representing two-thirds of the world's population. This will represent the most important single opportunity for the global construction industry.

*“China's modern day Silk Road is a global 'game-changer' for construction”*

China's new Silk Road will boost trade as well as construction output in almost every country touched by modern road and rail links, advanced communications and technology and maritime links that China intends to fund and build. China is also bringing together the much needed funding, via the new Asian Infrastructure Investment Bank (AIIB), set up to rival the US and Japan, and underpinned by a large number of individual national sovereign wealth funds.

Arguably, Russia has much to gain from its strategic tie-up with Asia, including a US\$400bn energy supply contract, involving the building of massive pipelines to China to supply energy to quench China's thirst over



*COOP HIMMEL B(L)AU: Dawang Mountain Resort, Changsha. A winter sports resort and water park across built on an abandoned cement-mining quarry and lake near Changsha. Located at the Dawang Mountain Resort outside the city, the Deep Pit Ice and Snow World will be constructed from cliff to cliff across the old quarry, which itself will be transformed into an artificial landscape of islands, pools and pathways*

the long-term for cleaner sources of energy and ranking as one of the largest infrastructure projects in the world. Russia is expected to move its focus towards growth markets in Asia, away from Europe, and will become a key partner in China's new Silk Road.

*“Russia expected to benefit from China's new Silk Road”*

International design firms, law firms and global engineering firms will benefit massively. As we stated earlier, China already has industrial capacity to soak up and China's new Silk Road project is expected to be a catalyst in opening up new sizeable international emerging market opportunities on a scale probably never seen before and utilising China's construction capability, along with China's vast manufacturing supply-chains. China has formidable strength in its construction industry. Six out of the Top 10 global construction firms are Chinese, according to ENR.

Included in Global Construction 2030 is a more detailed examination of China's planned Silk Road, complete with maps and details of initial Silk Road investments. This has been written by the China-Britain Business Council, a world renowned authority in relations with China. Britain and China have developed a close government to government collaboration on infrastructure, and Britain was quick to sign up to the AIIB as a founder member, whereas the US preferred to stand back, seeing it as a threat. Britain has already benefitted from significant investment from China, including the recently announced investment from China in Britain's nuclear power program.

*“China to spend US\$44.7 trillion on construction cumulatively by 2030”*

## India – Fastest Growing Construction Market to 2030

Our forecasts show that India will move rapidly up the Global Construction Perspectives/Oxford Economics global construction rankings, overtaking Japan to become the world's third largest construction market by 2030.

*“India overtakes Japan by 2030 to become third largest global construction market”*

We expect India will add US\$1 trillion to our global growth story for construction to 2030, and with a rate of growth almost double that of China over the period to 2020.

India is the fastest growing construction market in the world to 2030, overtaking China and countries such as Qatar that is currently undergoing significant infrastructure development relative to the size of its economy.

*“India fastest growing construction market globally to 2030”*



*ADRIAN SMITH+GORDON GILL ARCHITECTURE: The Imperial 3, shown as a concept design, is a 400m (1,312 ft.) 116-storey supertall residential skyscraper located in South Mumbai next to Imperial 1 and Imperial 2 which are currently the tallest skyscrapers in Mumbai. The Imperial 3 would be one of India's first supertall skyscrapers to achieve a LEED Platinum rating for environmental sustainability from Green Building Council*



**MAKE ARCHITECTS/TH REAL ESTATE:** 40 Leadenhall Street is an office and retail development in the City of London with 910,000 sq.ft. of lettable space



India has the largest housing market in the world and will need to build 170 million houses over the next fifteen years to meet the needs of its growing and rapidly urbanising population. India has one of the lowest of any urban populations in the world.

*“India needs to build 31,000 new houses a day over the next 15-years to meet the needs of its rapidly growing and urbanising population”*

Our forecasts for India recognise that it still remains difficult to do business in India, with significant remaining bottlenecks. Infrastructure in India is very poor quality with the overall quality of India's infrastructure ranked 90 out of 144 countries by the World Economic Forum and with the quality of electricity infrastructure ranked as 103 out of 144 countries.

India is also ranked 130 for ease of doing business, compared to China ranked at 84 and Russia ranked at 51, according to the latest World Bank Group league tables.

Our forecasts also take account of the significant levels of indebtedness within India's infrastructure sector, including financially stressed PPP infrastructure assets and stalled infrastructure projects. For growth in India's infrastructure sector to resume confidently there will need to be significant short-term government led investment in infrastructure. In addition, with the domestic banking sector lacking the financial firepower and expertise on infrastructure, India will need to look towards support from outside India. So far, China has only made relatively small inroads into funding India's infrastructure, relative to India's size, scale and opportunity. More recently, Singapore, Malaysia and UAE have shown interest.

Our Global Construction 2030 report includes further insight into India's bottlenecks and road to reform, written by experts on India by the world renowned Control Risks.

We see upsides to our forecasts for India if Modi's proposed reforms prove to be successful.

*“India to spend US\$13.1 trillion on construction cumulatively by 2030”*

## UK Stand Out Construction Market in Europe and Only G7 Country to Move Up in Global Ranking

It is the first time that the UK has featured in our Global Construction Perspectives/Oxford Economics global ranking of growth.

Between now and 2030, the UK is set to rise to become the world's sixth largest construction market, overtaking Canada and Germany to also become Europe's largest construction market

*“UK is set to become the world's sixth largest construction market and will overtake Germany to become Europe's largest construction market by 2030”*

The UK has suffered from long-term underinvestment in its infrastructure and housing, which means that large deficits have built up. Britain needs to build 3.3 million new homes over the next 15 years to meet the needs of its growing population.

*“UK needs to build 3.3 million houses over the next 15 years to meet needs of growing population”*

The UK government has been determined to see through a number of 'game-changing' infrastructure mega projects that will fuel growth in the medium to longer-term.

Britain's proposed mega projects are on a scale not seen for decades within the UK (except for the recent Crossrail project), and will help propel



**ARUP:** Garden Bridge, London. The Garden Bridge is a proposed pedestrian bridge over the River Thames, sitting between Waterloo Bridge and Blackfriars Bridge. Conceived by the actress Joanna Lumley, the bridge will feature trees and plants stretching over 367 metres, 30 metres wide and costing approximately GBP175 million to build and around GBP3 million a year to run



US embassy in Nine Elms, Battersea. The 11 storey cube-shaped building, one of the highest performing energy use and sustainability in the world



Nine Elms on the South Bank, will be one of London's greatest transformations, becoming an ultra-modern complex offering 16,000 homes and 25,000 jobs, schools, parks, culture and the arts, set over 196 hectares including the iconic Battersea Power Station





ZAHA HADID ARCHITECTS: Beijing New Airport Terminal Building, Daxing, Beijing, set to become the world's largest airport passenger terminal

the UK economy forward, if they are implemented. Projects include the new GBP50bn High Speed 2 rail connection from London to Birmingham with onward connection with Manchester and Leeds.

“UK to spend US\$6.2 trillion on construction cumulatively by 2030”

The question of implementation of all of the UK's proposed and planned mega projects is still uncertain, and capacity constraints to procure and deliver will mean increased competition entering the UK market to take advantage of growth opportunities. Competition eyeing up Britain's growth story include European and Asian construction companies. First mover advantage is important. Britain also faces a huge skills crisis which the government has recognised.

Other mega projects, comprising over GBP150bn worth of capital investment, include the expansion of Heathrow Airport, UK-wide strategic rail and road programs, a further Crossrail project across London and a program of investment to support the Northern Powerhouse.

“UK's mega projects to drive heightened growth to 2030”

In our forecasts, we have been constrained by the inability of the UK government alone to fund the infrastructure that Britain badly needs to support growth in its economy. We recognise that 70% of infrastructure in Britain is funded privately. We have also been constrained by the government's continued drive to cut Britain's budget deficit and to balance the books by 2018/19. The continuing austerity measures mean that public spending on construction will continue to tighten, but this is more than made up for by growing private sector investment. We also recognise and are constrained by the burden of significant investment in Britain's infrastructure on and the ability of consumers to pay significantly larger amounts for their infrastructure consumption. Lastly, Britain's looming skills crisis means there could be a lack of capacity to take on and deliver all mega projects.

Funding of Britain's infrastructure by China is a 'game-changer', with GBP105bn expected to be invested in UK infrastructure and real assets over the next decade, according to a recently published report by Pinsent Masons. This includes a one-third stake in a French-led project to build a new GBP24bn nuclear power station at Hinkley Point in Somerset.

China has also invested in several high-profile commercial real asset development projects, including Manchester Airport City and ABP's GBP1.7bn Royal Albert Docks.

“Chinese Funding of Britain's infrastructure is a game-changer”

China's massive construction companies are currently looking to move their considerable resources into the UK construction market, one of the most 'open' for business markets in Europe.

## ASEAN Tigers Rise

New ASEAN Tigers are rising – Indonesia, Myanmar and Vietnam – will show growth rates of 6% pa or higher to 2030.

“New ASEAN Tigers rise to boost growth”

“ASEAN construction market rising to over US\$1 trillion per annum by 2030”

The ASEAN construction market is expected to exceed US\$1 trillion by 2030, with growth driven by labour intensive light manufacturing industries moving across the South China Sea to Asia's emerging markets, where wages are around half of what they are in China.

“Global Construction 2030 has given Royal BAM Group a clear perspective on emerging global markets, supported by reliable forecasts”

– George Mazloumian, Chief Executive  
BAM International

“Global Construction 2030 is the definitive overview of one of the most important sectors of the global economy. We have found it invaluable in informing our expansion into new markets for our technology solutions”

– Colin Smith, President  
Textura Europe



ATKINS: Construction has begun on Vietnam's tallest building - Viacom Landmark 81 - in Ho Chi Minh City. The 81 - storey 480m super-tall tower will face the Saigon River and feature a hotel, apartments and a shopping centre. Completion is set for 2017.





**ZAHA HADID ARCHITECTS:** King Abdullah Financial District Metro Station, Riyadh. With a population of more than five million, the capital Riyadh is Saudi Arabia's biggest city and is experiencing rapid growth. The façade patterning reduces solar gain while it's geometric perforations contextualise the station within its cultural environment. The overall composition resembles patterns generated by desert winds in sand dunes

## Indonesia Ranks as Fourth Largest Construction Market in 2030

Our Global Construction Perspectives/Oxford Economics global ranking of construction markets shows Indonesia rising to become the world's fourth largest construction market by 2030, moving up from its current position as the 11th largest market, overtaking Japan.

*“Indonesia overtakes Japan to become world’s fourth largest construction market by 2030”*

## Challenges Ahead for Japan

Japan sinks to become the world's fifth largest construction market, with longer-term housing declines, as Japan's population shrinks.

*“Japan construction market sinks on poor long-term growth fundamentals”*

The housing market in Japan will experience close to zero growth in the next decade to 2025. After this, we forecast sharp falls in housing production in Japan.

*“Japanese housing output to fall sharply after 2025”*

## Europe Won’t Find its ‘Lost Decade’ of Growth

The short-term sugar-rush of consumer spending, boosted by lower oil prices, will fade, as Europe's continuing structural economic problems means it won't find its lost decade.

The European construction market will not recover to reach pre-crisis levels until 2025, as we highlighted in our previous report. This is still the case. Growth across Western Europe's major construction markets will average only 1.6% pa, and will not exceed 2.0% in any one year to 2030.

*“European construction market will not recover pre-crisis levels of spending until 2025”*

In Germany, the outlook is subdued, primarily due to demographic weakness (although this could change with the recent surge in migration seen in Germany), but also because of residual uncertainties around the impact of a potential Greek exit from the Eurozone. Stronger public finances help Germany to invest in infrastructure.

Germany is the slowest growing construction market in the world, from our analysis of the 48 countries covering around 90% of world construction output).

*“Germany world’s slowest growing construction market to 2030”*



**ZAHA HADID ARCHITECTS:** Bee'ah Headquarters, Sharjah, UAE. The new Headquarters building is part of the Bee'ah's ongoing investment to transform attitudes and behaviours to support to achieve Zero-Waste to landfill targets. The Bee'ah School of Environment (BSOE) has hosted to date 174,000 children in over 210 schools across the emirate. Bee'ah Headquarters is LEED Platinum with ultra-low carbon and minimal water consumption

In France, and Italy, construction activity is expected to remain at 6% and 11% below pre-crisis levels respectively by 2030. Both France and Italy suffer from tighter public finances than Germany and also have an inability to push through the necessary reforms to improve business competitiveness and ultimately drive growth.

Spain's economy has performed well recently, and we forecast a 2.2% pa average rate of growth over the next ten years, representing the fastest rate of growth in the Eurozone.

*“Spain's construction market is fastest growing in Eurozone to 2030”*

## Brazil Risks a Lost Decade

Brazil faces a lost decade as the stranglehold of outdated labour laws, high and complex taxes and excessive bureaucracy continues to hold back the economy. Brazil is ranked 122 out of 140 countries on labour market flexibility, according to the World Economic Forum, whilst on factors such as the impact of taxation and ease of market entry, Brazil's rank is 128 out of 140 countries, also having worsened in the past several years.

*“Lost decade for Brazil, with minimal growth for Brazil to 2030”*

The Petrobras scandal is also having a tangible impact on construction. Petrobras accounted for one-tenth of total investment activity in Brazil and with a recently announced 40% cut in capital expenditure, the knock-on effects are significant.

The strong demographics that supported Brazilian growth over the last decade are reversing, leading to stagnation in demand for construction.

Our forecasts for Brazil show only minimal change in construction output to 2030.

## Mexico Overtakes Brazil as the Largest Construction Market in LATAM

Mexico is the main growth story in Latin America, overtaking Brazil to become the largest construction market in LATAM by 2030.

*“Mexico overtakes Brazil by 2030, becoming Latin America’s largest construction market”*

## Colombia to Rival Brazil for Growth Contribution

Our forecasts for Colombia show that the volume of growth in Colombia will rival that of Brazil over the period to 2030, providing a significant growth potential, with the size of Colombia's construction market to almost double in size by 2030.

*“Colombia construction market to almost double by 2030, with growth contribution rivalling Brazil”*





RLB: Expo 2020 Dubai. The United Arab Emirates will host the World Expo in Dubai in 2020. This is the first time that World Expo will be held in MEASA. Dubai's World Expo theme of Connecting Minds, Creating the Future and is expected to attract 25 million visits, 70% will be overseas

# Extraordinary Monetary Policies Causing Global Imbalances in Construction

While relative financial stability has returned to nearly every country affected by the global financial crisis, we must remind ourselves that this is in the context of monetary policy across the world that is far from normal. Central bank policy rates remain at rock-bottom levels in the US, UK, Japan and the Eurozone and balance sheets have ballooned due to central bank bond-buying known as quantitative easing. No one is certain of whether the path to policy normalcy will be smooth or bumpy.

While we believe that the return to monetary normalcy will proceed smoothly with an expected “lift-off” by the Fed in late 2015 or early 2016, construction will need to be prepared for turbulence if financial markets react unpredictably to such policy changes. Our Global Construction report analyses the impact on construction under a scenario of bond fright.

*“Under a scenario of bond market fright, caused by Fed lift-off in late 2015 or early 2016, construction would suffer significant downside risks in emerging markets, in particular – India, Turkey, Brazil and Russia”*

# The Reduction in Oil and Commodity Prices Isn’t All Good News

While lower oil and other commodity prices are broadly a net positive for the global economy, the adverse effects are severe in certain regions. Nowhere is this more evident than in Russia, where construction activity was already declining before the sharp fall in oil prices in autumn 2014.

Even though Russia’s long-term economic prospects are among the weakest in the emerging world, construction activity is likely to rebound as oil prices gradually increase later in the forecast horizon.

Housing in Russia will decline over the period to 2030, due to weak demographics.

In the developed world, Australia is feeling the strongest headwinds from the fall in the oil price and commodity prices more generally, as its recent strength has depended on the commodities super cycle driven by the rapid growth of Chinese industry. With the super cycle largely over, infrastructure spending in Australia will not regain its 2012 peak until 2030 – though the weaker Australian dollar will help support construction in other sectors of the economy, including a potentially large program of urban infrastructure renewal and capacity building to support a growing population.

*“Australian infrastructure market will not recover to 2012 peak until 2030”*

*“New sectors begin to drive growth story for Australia, along with urban infrastructure program”*

The US and Canada are also constrained, not because they are over-reliant on oil extraction as a source of economic activity and government revenues, but because the costs of extraction are higher than in most other regions. In the US, investment in mining exploration, shafts and wells has plummeted by 35% since the end of 2014. But innovation is driving down extraction costs, which will amplify the recovery when



RLB: Expo 2020 Dubai. The United Arab Emirates will host the World Expo in Dubai in 2020. This is the first time that World Expo will be held in MEASA. Dubai's World Expo theme of Connecting Minds, Creating the Future and is expected to attract 25 million visits, 70% will be overseas

oil prices start their expected gradual rise in coming years. But in Canada, the oil sands are expected to become less cost competitive over time, resulting in Canada’s fall from the sixth- to the seventh-largest construction market globally.

Even the oil-rich countries in the Middle East, whose extraction costs are relatively low, are not immune from the oil downdraft. In Saudi Arabia, for instance, the authorities are now more actively talking about cutting infrastructure spending. The fiscal deficit is forecast to rise to 17.3% of GDP in 2015, dropping only a little to 15% of GDP in 2016.

In the UAE, Expo 2020 is expecting 25 million visits, which will provide considerable support to UAE infrastructure for the rest of the decade. Nonetheless, Saudi Arabia will remain the largest market in the Middle East, some 30% larger than that of the UAE.

*“Saudi Arabian construction market 30% larger than UAE by 2030”*

Qatar also faces fiscal challenges, but it will nonetheless maintain its status as the fastest growing global construction market to 2020. After that, we expect a considerable deceleration subsequent to the 2022 FIFA World Cup, with a sharp fall in construction output.

*“Qatar to maintain status as fastest growing construction market to 2020, but sharper falls in construction output after FIFA2022”*

For MENA as a whole, growth of the construction market is set to nearly halve relative to the last ten-year period.

Despite this, we estimate US\$11.5 trillion of spending on new construction and engineering projects across MENA in the next 15 years to 2030.

*“MENA region to spend US\$11.5 trillion on new construction by 2030”*

# Nigeria’s Construction Market to Increase 160% by 2030

Nigeria’s construction market will grow by 160% by 2030, adding a further US\$100bn to Nigeria’s construction output by 2030, and exactly double growth for South Africa.

*“Nigerian construction market set to grow by 160% to 2030”*

Overall, we estimate the construction market in sub-Saharan Africa will grow by over 120% by 2030, with significant growth driven by the fast urbanisation of Africa’s Top 20 cities.

*“Sub-Saharan Construction Market to grow by 120% with US\$4.8 trillion cumulatively spent on construction by 2030”*

Our Global Construction 2030 report provides further analysis of Africa’s Top 20 cities and their stages of development and the kinds of construction activity that will dominate each stage of city development.

*“Johannesburg drops down city rankings of Africa’s largest 20 cities, by GDP”*



**KATARA HOSPITALITY:** Kátara Towers, Lusail Marina District, Doha. With an architectural design inspired by the seal of Qatar, this property is set to become the hospitality landmark in Lusail. The crossed swords of the country's seal have been architecturally translated into twin arched towers that rise gracefully from the podium level, while the landscaped gardens and palm trees reflect in the ocean frontage. Expected to open in 2018 ready for the Qatar Football World Cup 2022.



## About Global Construction 2030

Global Construction 2030 is the fourth in a series of major global studies of the construction and engineering industry to be published by Global Construction Perspectives and Oxford Economics. The report and over 50 separate databases provide accurate and reliable forecasts to 2030 and analyse the market dynamics in 48 major construction markets representing almost 90% of world output. The report and databases provide forecasts for construction and engineering globally as well as for country markets. The report and databases also examine trends and give forecasts for key sectors such as infrastructure, residential and non-residential markets globally, regionally and for 29 major construction markets. Global Construction 2030 is an invaluable tool for senior executives and policy makers globally who seek to gain a clear perspective on the global construction industry. The forecasts and report have been written by the world renowned and expert team from Global Construction Perspectives and Oxford Economics.

Further details can be found at: [www.globalconstruction2030.com](http://www.globalconstruction2030.com)

## About Global Construction Perspectives

Global Construction Perspectives provides detailed forecasts of construction providing accurate and valuable analysis and evidence on the future of the global construction and engineering industry. Reports such as Global Construction 2030 help senior executives within the global construction industry make the right decisions about future strategy and direction. Global Construction Perspectives works in partnership with Oxford Economics to produce high quality forecasts for the global construction industry. Global Construction Perspectives publishes reports on issues of strategic interest to the global construction and engineering industry and works with a wide range of sponsors and partners. Staff and consultants at Global Construction Perspectives have a wide range and depth of skills and a deep understanding of current and future trends in global construction.

## About Oxford Economics

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic advice, forecasts and analytical tools to international institutions, governments and blue-chip companies. Building on these foundations, Oxford Economics is now an independently-owned world-leader in high quality, quantitative analysis and evidence-based business and public policy advice. Combining skilled analysis with detailed information on the global economic environment creates a firm base for decisions. Oxford Economics works in partnership with Global Construction Perspectives to produce high quality forecasts for the global construction and engineering industry and operates a linked global macroeconomic model that drives a global industry model from which construction forecasts are derived. This ensures complete consistency between the broad economic outlook and the prospects for the construction industry worldwide.



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