

International Construction Costs Report: What will it mean for 2015?



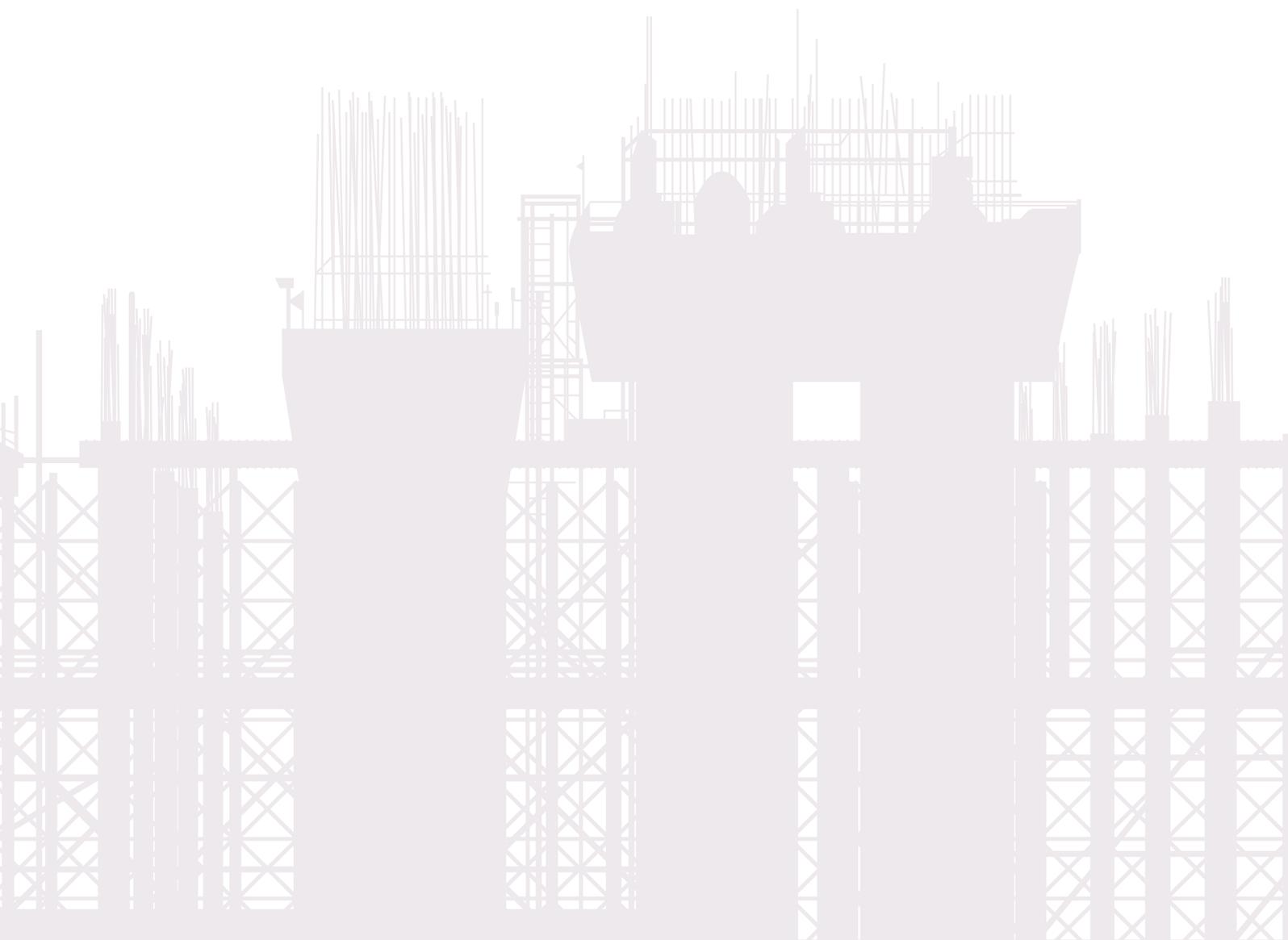
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International Construction costs trends at a glance

This assessment is based on a comparison of local construction costs converted to Euros to enable direct comparison. This comparison is particularly relevant to international clients who procure construction in multiple locations using internationally traded currencies.

- Denmark and Hong Kong trail Switzerland as the most expensive nations in which to build
- The average cost of construction in Central London is even higher than in Switzerland
- Construction in Japan is now cheaper than the United States
- India is the cheapest country in the world for construction
- Commodity prices are to remain low which will limit growth in construction cost inflation



The annual ARCADIS International Construction Costs Report benchmarks building costs in 43 countries across the globe. This paper provides a snapshot of the current trends in the construction industry and an outlook for what this will mean in 2015. In addition to the overall costs, the paper also considers wider implications for retailers, healthcare providers, commercial and residential developers.

Construction markets in 2014

The 2014 results demonstrate the extent to which the economic recovery is affecting relative costs in many Western markets, while comparatively low costs in major Asian markets are encouraging increased investment which will underpin wider economic growth. With the exception of some European markets and locations such as Hong Kong, Qatar and Saudi Arabia where specific market constraints are driving inflation, price movements have been somewhat subdued during 2013/14, aided by weak commodity prices and plentiful material supplies.

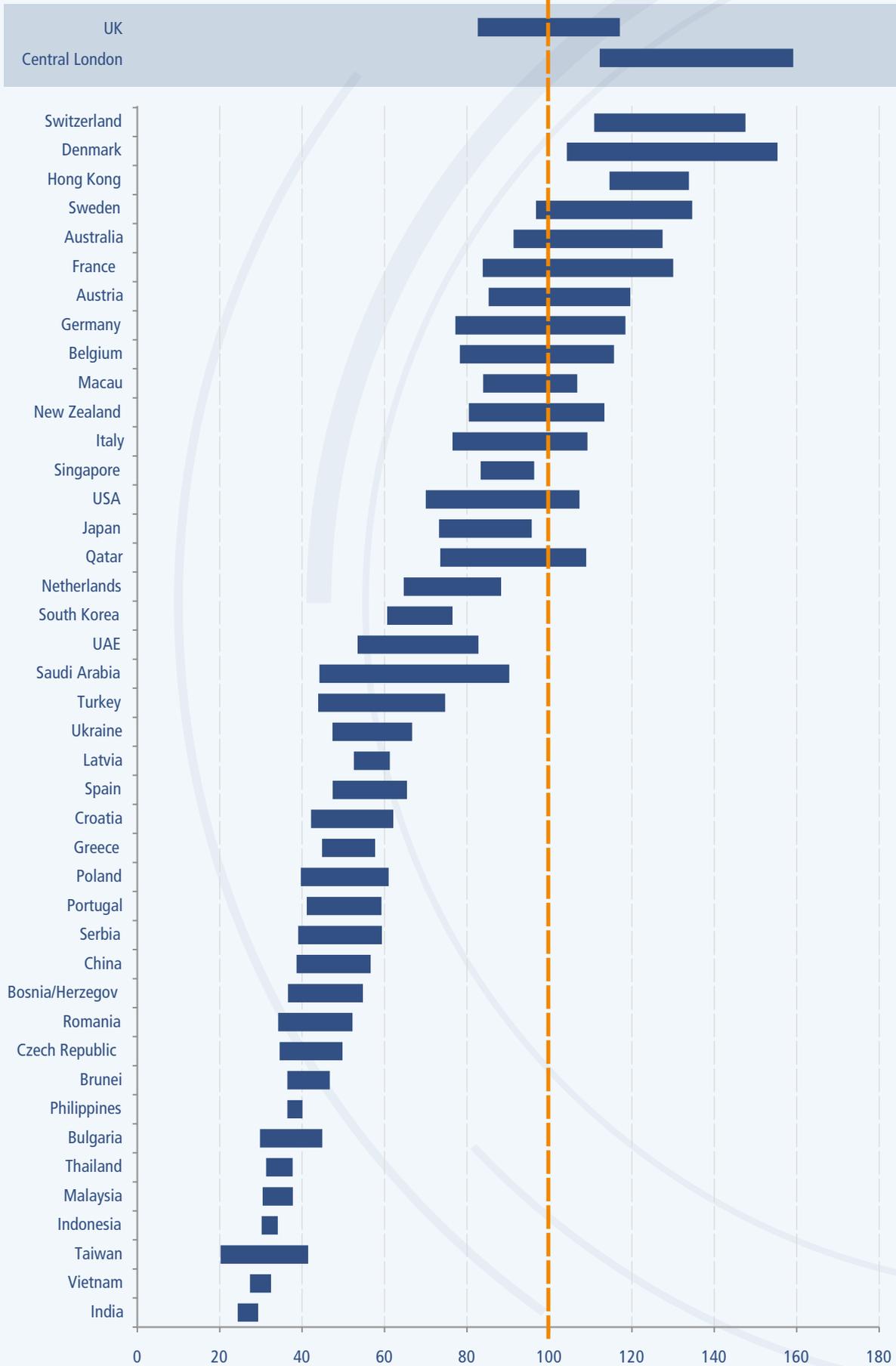
The deep devaluation of many emerging market currencies relative to the Dollar and Sterling during 2013/14 means that relative costs have fallen steeply in these locations. Construction costs in India, Indonesia, Malaysia, Thailand and Vietnam are now all less than 35 percent of typical UK levels when costs are compared on the basis of a common currency. Similarly, relative costs in Japan have fallen to below the USA in our global rankings due to continued devaluation of the Yen.

Of particular note is the recovery of the UK's construction industry. The strength of Sterling relative to the Euro and accelerating price inflation have propelled the UK up the rankings whilst established high-cost locations such as Switzerland and Denmark have held their places at the top of the cost league. Price inflation continues to affect the Hong Kong market, resulting in its elevated position in the rankings. Meanwhile, although the United States has experienced some cost inflation during 2014, this was not enough to change its position in the rankings.

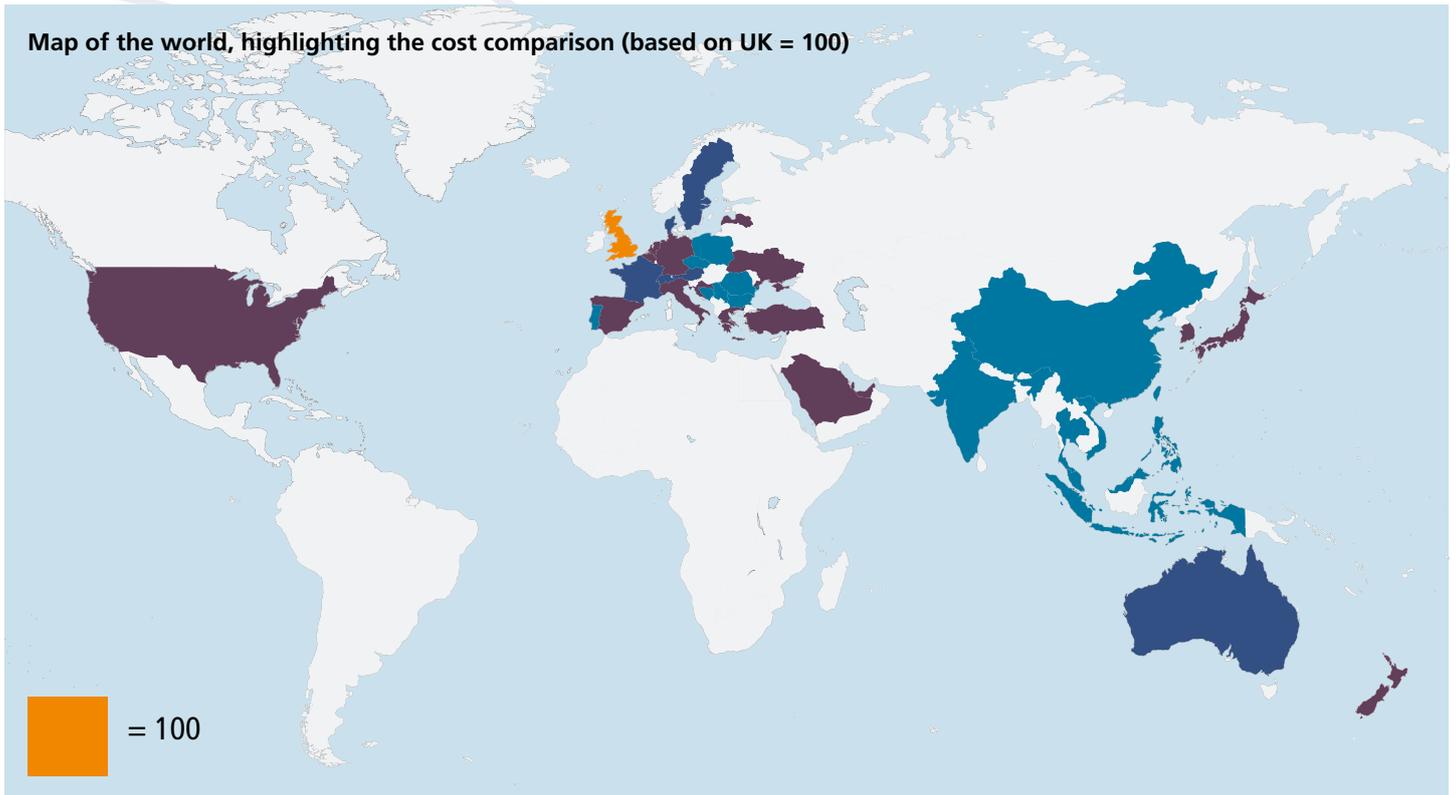


The Research

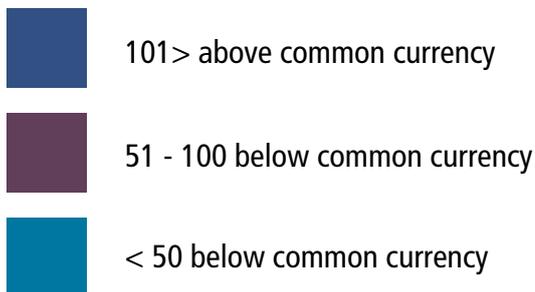
International Cost Comparison (Indexation based on UK = 100)



Map of the world, highlighting the cost comparison (based on UK = 100)



In relation to the UK = 100 as a common currency.



Methodology

The comparative cost assessment is based on a survey undertaken by ARCADIS of construction costs in 43 locations, covering 13 building types. Costs are representative of the local specification used to meet market need. The building solutions adopted in each location are similar and as a result, the cost differential reported represents differences in specification as well as the cost of labour and materials – rather than significant differences in building function.

Costs in local currencies have been converted into Euros as a common currency for the purpose of the comparison, but no account has been taken of purchase power parity. High and low cost factors for each building type have been calculated relative to the UK, where average costs for south eastern England equal 100. The relative cost bars plotted in the chart represent the average high and low cost factor for each country, based on the costs of the 13 buildings included in the sample.

The comparisons presented in this report will be subject to variation over time as a result of factors including:

- Exchange rates
- Local market conditions
- Specification levels - particularly when related to projects targeted at global markets.

Regional Insights

ASIA

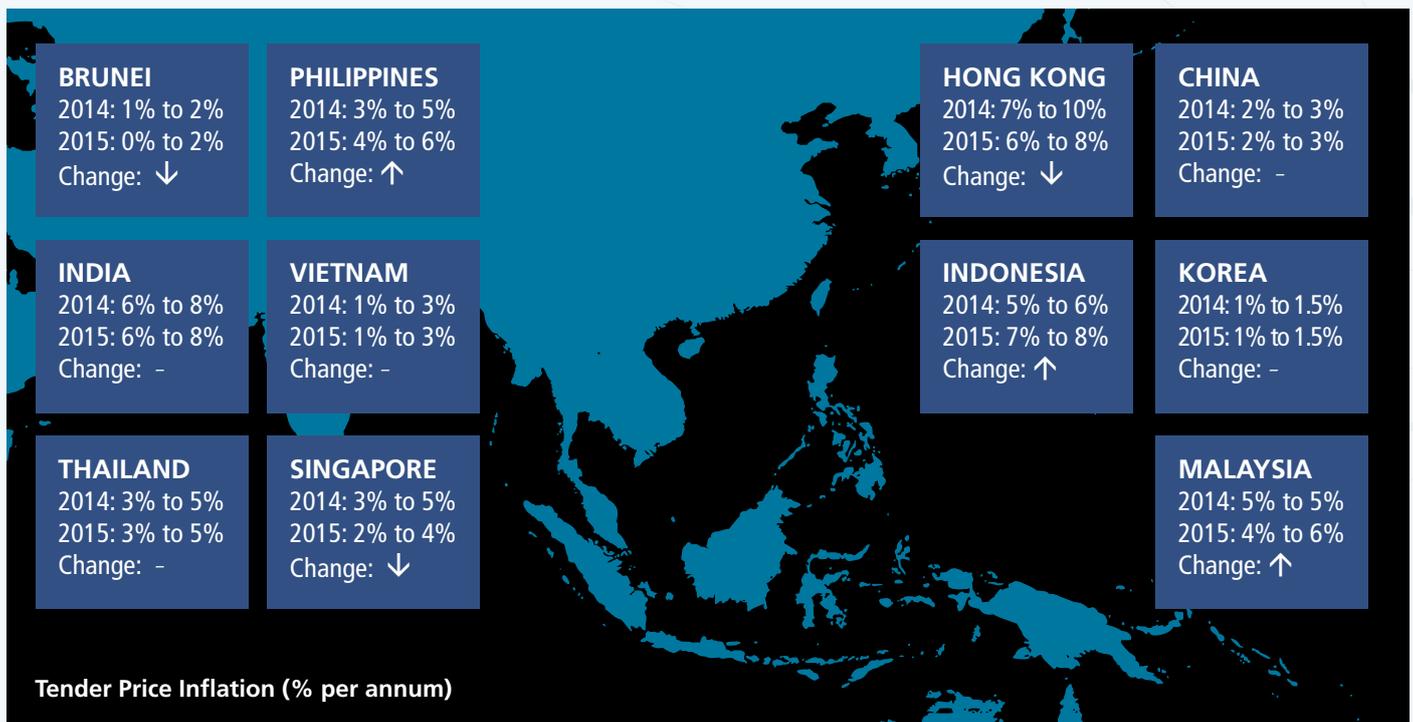
In China, the gradual shift to a consumption-based economy means that the huge growth in construction that we have witnessed over the last ten years is unlikely to continue in the long term. Elsewhere in Asia, construction markets had another strong year, particularly in Japan where the stimulus associated with one of the three 'arrows' of Abenomics has had a significant impact. Hong Kong and Singapore also saw strong growth throughout the year, driven by a combination of robust housing markets and high levels of infrastructure spend.

What does this mean for 2015?

Looking ahead, despite the changing nature of the economy, we expect construction investment in China to continue to diversify across both project types and geographies, which will sustain strong growth during 2015 within the country. Malaysia has seen strong growth of late and this looks set to continue. However, along with other members of the next eleven including Indonesia and the Philippines, they may find that delivery of their ambitious investment programmes becomes ever more challenging. Fluctuations in commodity and currency markets, along with wider economic trends, may also affect the ability of these markets to fund projects or attract PPP investment.



Asia Construction Inflation Outlook 2014 - 2015



MIDDLE EAST

Despite increasing instability in the wider Middle East, three trends are having a positive influence on levels of construction spend in the Gulf Region. The first is the continuation of high levels of investment on social infrastructure to service the growing population; the second is investment in economic diversification, exemplified by ambitious plans for transport investment such as the US\$200 billion GCC rail network which is to link Saudi Arabia, Kuwait and Qatar. Meanwhile, event-driven construction is also underpinning huge levels of growth in the region, and with Dubai securing the 2020 World Expo on top of Qatar's World Cup success; this is a trend that will only strengthen over the next few years. Whether the recent weakness in oil prices has a short or medium-term impact on construction spending plans will become clearer during 2015. Of the OPEC members, Abu Dhabi, Qatar and Saudi Arabia are the best placed to be able to continue to fund budget commitments. But with oil trading at under \$55/barrel in 4Q 2014, there will no doubt be increasing pressure on public spending in 2015.

EUROPE

The ongoing crisis in the Eurozone has impacted heavily on the construction sector and in many peripheral economies, it could be a long time before the industry rallies to anything like the levels seen pre-2008. Furthermore, while optimism about the prospects for the Eurozone is waning, poor results for a number of key countries in the second half of the year have underlined the fragility of the recovery. Caution should be adopted for those operating or looking to invest within the sector.

Central London, when viewed in isolation as a global city ranks top in our relative cost league. This reflects the very high specification levels seen in many London developments and the fact that the UK construction industry has never been as productive as its US and European peers. High costs of development in London are also the result of an acceleration of client demand in assets, such as prime residential, which are reaching a capacity ceiling, and has led to significant cost inflation over the past year. This is very much a London prime residential market phenomenon, and very different from other UK markets outside of the capital.

What does this mean for 2015?

Following weak growth and the broadening impact of sanctions against Russia, the European Commission revised its 2014 growth forecast to a mere 0.8%. Growth of only 1.1% is forecast for 2015. Outside of the Euro zone, the UK, Scandinavia and Eastern European states such as Poland are forecast to grow by around 3% in 2015, figures that dwarf the likes of France and Spain which are expected to grow by 0.7% and 1.7% respectively. Of greater concern, however, is Italy which re-entered recession in the second quarter of 2014, and will grow by only 0.6% in 2015. Recent reports by the European Commission of a €300 billion infrastructure investment programme will be highly dependent on private investment and will not result in an increase in activity before 2016.



NORTH AMERICA

Overall, the construction sector in the region has enjoyed a similar recovery in 2014 as in 2013. In particular, the housing market recovery continues to blossom. Shale gas, oil and minerals made a major contribution to growth in 2014 but with falling commodity prices across the board, investment will be cut. Overall demand, however, is on the up and with costs reducing for energy-intensive manufacturers, the industrial sector has seen significant growth. High demand for residential property in central locations means that we are seeing large developers, who traditionally focused on the over-built office market, switching to high-end residential in pursuit of profitable development opportunities.

What does this mean for 2015?

Two key trends affecting the sector are the re-industrialisation of the United States and the reinvigoration of many city centres across the country. The former is being driven by the reduced gap in production costs between the US and Asia and the desire by many manufacturers to shorten their supply chains. The latter is being fuelled by commercial and residential development with both workers and residents preferring to be centrally located. Both of these trends will be sustained into 2015 and will help rebalance the construction recovery away from lower density residential construction, which has been growing briskly for the past 2-3 years.

The growing infrastructure deficit in the US is increasingly seen as a constraint on US growth. An infrastructure summit hosted by President Obama in September 2014 identified \$50 billion of potential sources of private investment. Acceleration of infrastructure spending during 2015 will further broaden the base of the construction recovery.



SECTOR INSIGHTS

HEALTHCARE

Healthcare is the world's largest industry. There is always a global market in which demand for capital investment in healthcare facilities is increasing, due to population growth, clinical developments, technology and life expectancy. Many countries have already noted near trebling of GDP health investment over the last 40 years and expectations of further major rises to 2030. Currently, demand for new and refurbished health facilities is high in the emerging economies such as the Middle East and Asia, whilst construction activity in most of Europe and the USA has not recovered to the pre-2008 crash levels and the consequential austerity programme. Hospitals and clinics tend to be significantly more costly to build than most other aspects of infrastructure and therefore is difficult to be precise about the scale and direct co-relation to economic growth and regeneration. As a result, whilst demand can be met by existing facilities, public investment is likely to be prioritized on growth generators including transport infrastructure, broadband communications and science and research facilities.

What does this mean for 2015?

In areas like Asia and the Middle East, there leads to sustained demand for mostly new and also refurbished healthcare facilities. By contrast, in the US the Obama reforms have led to a degree of market uncertainty, resulting in a delay in some investment in healthcare infrastructure and economics dictate that healthcare system expenditure levels are under pressure. This has also meant subduing new capital developments across Europe. There are a small number of exceptions in higher growth economies which are attracting private as well as public investment. The focus remains on making every metre squared of construction pay and in changing processes to be more efficient, therefore needing more streamlined but higher technologically advanced buildings.



RESIDENTIAL

Sub-prime lending on housing was a key trigger for the global financial crisis and it is unlikely that pre-crash volumes of residential construction seen in markets such as the United States, Ireland or Spain will be seen again. Even after three years of steady recovery, volumes of house building in the US remain at only 50% of the pre-crash levels. Some markets are much more active, none more so than China, where one analysis has suggested that due to build rates outpacing migration into cities, over 20% of apartments in urban areas are vacant, with over-supply focused in particular in the second and third tier cities. Other buoyant markets include Canada and the World Cities. Quantitative easing has had a significant impact on investment patterns and asset values. This has contributed to the global boom in prime and super-prime development, which has seen borrowing controls introduced into markets including Hong Kong and Singapore, and a rapid acceleration of large scale development in London, New York and other major cities.

What does this mean for 2015?

2015 could prove to be a very interesting year for the residential sector across the world as the major trends that have been driving residential development start to shift. China is attempting to engineer a soft landing, but continues to rely on high volumes of capital investment to sustain overall GDP growth at over 7%. At the same time, the end of quantitative easing in the US and UK will reduce some of the upward pressure on residential prices. With enormous levels of output in previous years, the stability

of China's residential market has become a major focus of concern both inside and outside China. Meanwhile, with urban populations across other parts of Asia and the Middle East growing rapidly, there will be growing demand for both affordable and high quality housing. Prime residential investment is however a global market and developers are operating in a wide range of markets to deliver a balanced portfolio based on return and the supply, demand and risk profile of each location. Prime markets in London have been a beneficiary of these trends and will see rapid acceleration in construction in 2015, which is expected to be accompanied by high levels of cost inflation.



COMMERCIAL

Construction in the financial and technology sectors is experiencing a relatively healthy period with falling vacancy levels, increasing activity levels and cost inflation seen across many major markets. In areas where residential development has also seen significant growth such as the US, Hong Kong and the UK, increased costs driven by the housing boom are affecting commercial development and in some cases, introducing viability challenges. One response to the challenge of affordability has been an increased interest from owners and developers in the refurbishment of existing assets. European markets are presenting particularly strong opportunities either in high growth markets such as London or Frankfurt, or in recovering locations such as Madrid where asset prices are low.

What does this mean for 2015?

We expect the prime housing boom in London and other global cities to impact on construction costs. London will potentially see price escalation of between 5-7% percent growth for the coming 2-3 years. Commercial projects will be affected but will experience less price inflation due to their more attractive risk profile for builders. Next year in the US, the core cities of New York, Washington, Boston and Los Angeles are likely to attract strong investment and, consequentially, price inflation, while other cities will see less growth and may actually see costs fall. In Asia, continued weakness in some currencies means that importing materials could come at an increasing premium, meaning the relative cost of construction is unlikely to fall in Asian markets, even if demand softens in some locations.



RETAIL

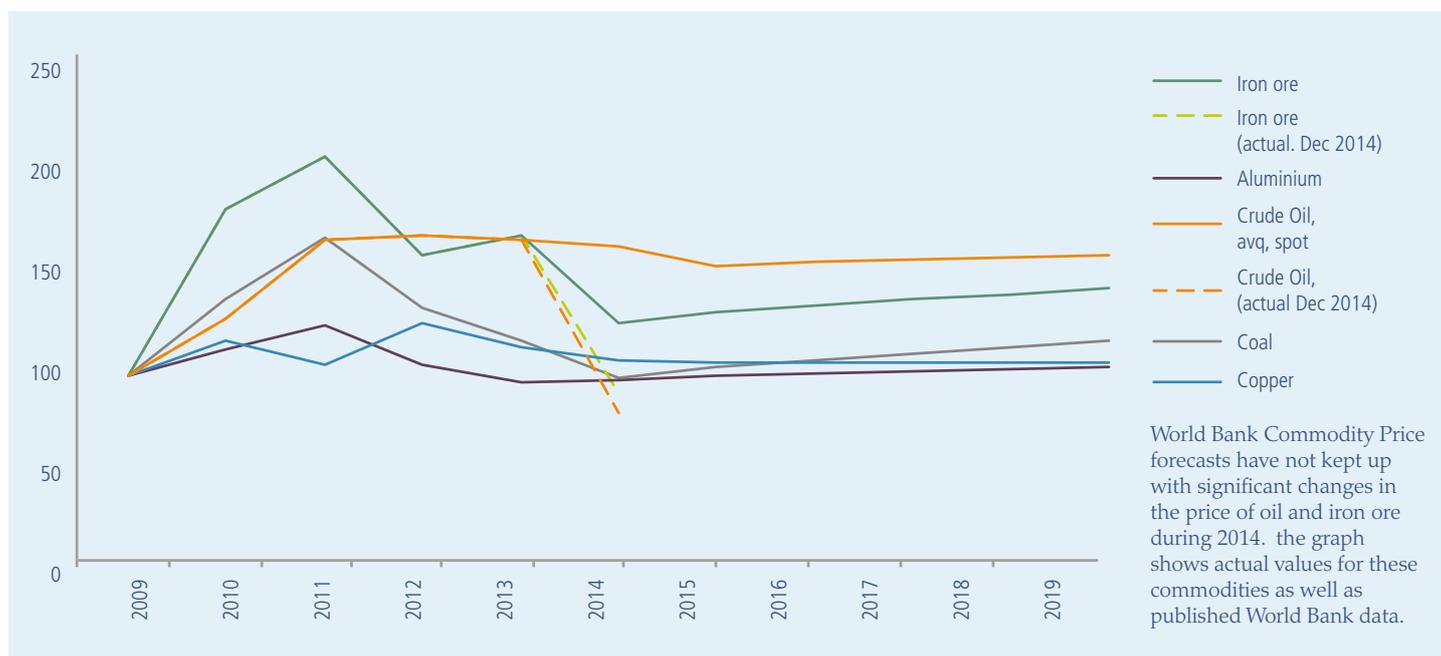
The growth of multi-channel retail has had some surprising impacts on the bricks and mortar side of the business. As well as investments in on-line presence and fulfillment, retailers have continued to invest in a greater number of smaller premises at the expense of some larger stores. The key reason behind this change in strategy is the evolving retail real estate footprint which is affecting the way retail is designed, procured, constructed and operated across the globe. With many retailers under mounting pressure to achieve ambitious targets in CapEx and OpEx, retail delivery models will continue to evolve.

What will this mean for 2015?

Even though e-commerce is rising in popularity, sales revenue generated in the physical store still remains strong in many retail segments. Although activity will remain sluggish in some nations within the Eurozone, for this reason we expect steady demand for retail construction across many Western markets into next year. In the UK for example, a wave of large shopping-centre developments is expected to start – ending a long period of inactivity in this key sub-market. One area where activity is slowing, however, is in food retail, where high levels of competition is leading the major chains to reduce their investment spend. One of the more interesting global markets for retail is that of Japan where increasing construction activity related to Abenomics investment programmes has had the effect of inflating material and labour costs. This upward cost trend may start to impact planned store expansions, and overseas retail investors may consider looking alternative markets where the prospects for sustained growth are healthier.



Global trends in commodity prices and currencies



Commodity prices

Generally speaking, commodity prices have remained in check during 2014 with costs dipping and limiting construction cost inflation across most global markets. That said, increasing tensions in the Middle East and Ukraine could potentially reverse this trend as we head into 2015. Aluminium and nickel prices are up on the year but copper and steel prices are down. The fall in the price of iron ore has continued throughout the year, with prices down by around 40%. However, the most striking trend in the year has of course been the rapid fall in the price of crude oil that has taken place since September. With Brent Crude trading at around \$50/barrel in December 2014 and prices forecast to fall further in 2015, it is clear that the impact of oil price movements – both on the spending patterns of consumers and the investment plans of producers – will be significant.

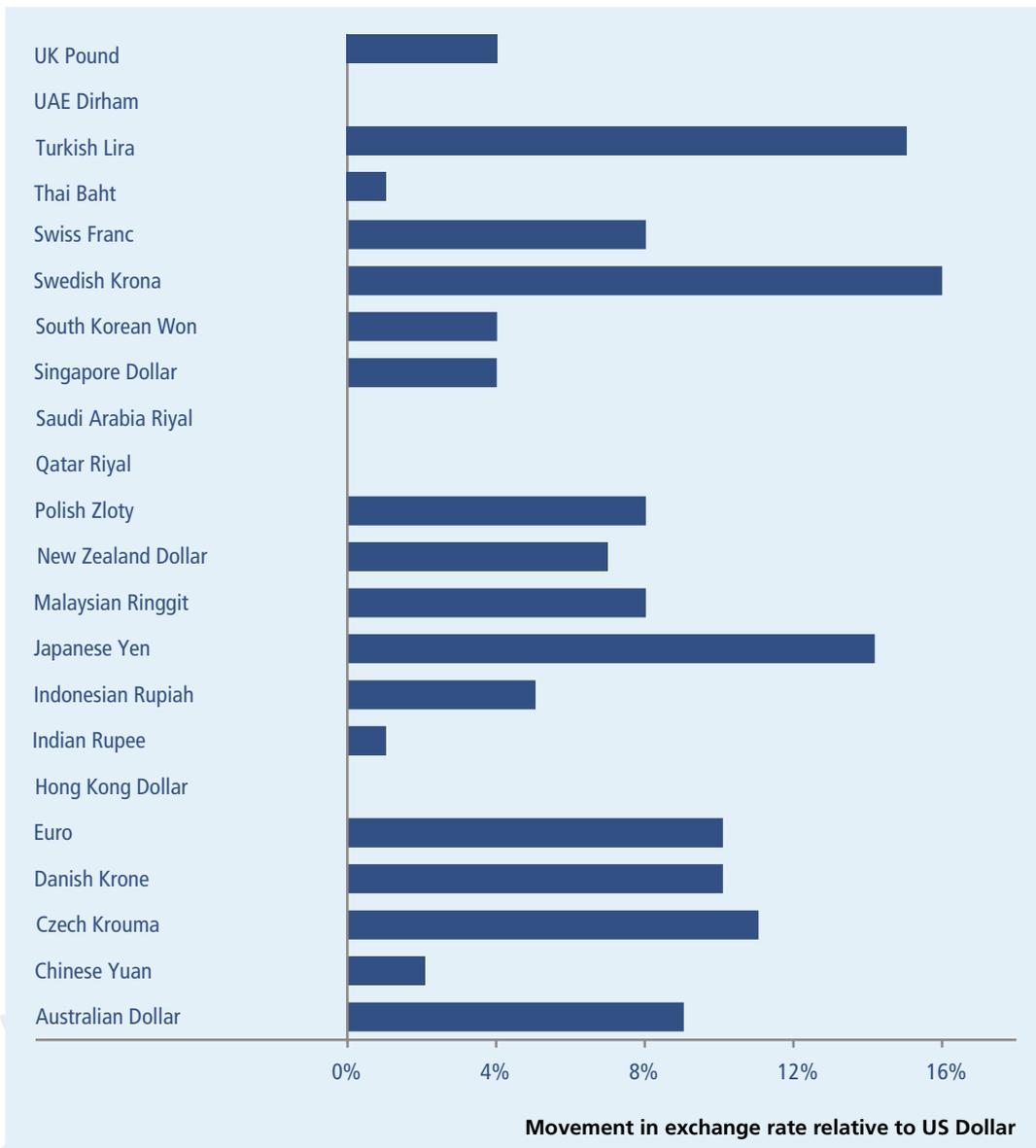
Furthermore, a stronger pound has contributed to lower costs of commodities in the UK during 2014 where copper prices have fallen by 10 percent, partly as a result of currency fluctuation. By contrast, depreciation against the dollar has hit hard both European and emerging economies including Turkey, Indonesia and Malaysia, potentially leading to a substantial increase in key construction materials.

- Coking coal prices are down by over 20% compared to the 2013 average to around \$110/tonne. This is largely as a result of continuing expansion of production in China;
- Iron ore prices are down by over 45% on the year to a five-year low of \$68/tonne, triggered by slower growth in demand from China and an expansion in productive capacity;
- Brent Crude prices dropped significantly during the final quarter 2014 to around \$50/barrel, with levels of supply being maintained following a key meeting of OPEC ministers;
- Nickel prices have fluctuated wildly as a consequence of a ban by Indonesia of the export of unrefined ore. This triggered a wave of speculative investment, and whilst prices are 12% up on the year;

Forecasting over a longer timescale, the World Bank currently anticipates that prices will remain fairly steady over the next five years, reflecting steady economic growth and increased levels of production. However, these forecasts, last published in October 2014 do not reflect the rapid adjustments to oil and iron ore prices that took place at the end of 2014.

Currency trends

Currency fluctuations - Dollar vs. global currencies (Dec 2013 to Dec 2014)



Perhaps unsurprisingly, currencies have had another turbulent year characterised by the growing strength of the US Dollar and associated currencies and the weakness of the Euro. The recovery of some developed economies has coincided with weakness in emerging market economies such as Indonesia and Turkey.

The chart above shows the extent to which the US dollar has strengthened during 2014, driven by a general recovery at the end of Q4. A strong dollar has implications for commodity prices and dollar denominated debt - which could adversely affect investment in some emerging markets.



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