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SOLVING CENTRAL EUROPE'S PARITY PROBLEM

The Czech Republic, Hungary, Poland, and Slovakia lag behind their Western EU neighbors when it comes to economic prosperity. The EU has a plan but can it bridge the gap? P12

FORECASTING OUT 25 YEARS
The future's in the demography
P5

LABOR SHORTAGE & GDP GROWTH
Why productivity gains matter
P6

ARGENTINA'S DEBT PROBLEM
What it means for investment
P7

RECESSION HITS BRAZIL
Will elections bring relief?
P8

AUSSIE'S AILING MANUFACTURING
In need of a recovery plan
P18

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VISION

Risks on many fronts

Economic growth has stalled recently in many countries around the world, from the Eurozone to Brazil, Russia, and many other emerging markets. While IHS continues to believe that global economic growth will gradually accelerate in the coming quarters and years, the risks today—especially for emerging markets—potentially jeopardize the return to healthy, sustainable growth and create an environment in which policy mistakes may have very serious consequences for the real economy. These risks include structural issues, such as essential market reforms that need to be implemented; cyclical issues, such as weak export demand and falling commodity prices; and changing demography, such as aging populations.

This issue of *IHS Quarterly/Economics* takes a close look at several countries facing elevated economic risk, all with quite different challenges for regaining growth. In her cover story on the four Central European states—Czech Republic, Hungary, Poland, and Slovakia—Sharon Fisher examines why these countries continue to trail their Western neighbors in economic performance. While all have enjoyed economic progress since joining the European Union in 2004, the rate of convergence with Western Europe has slowed since 2009. Their prospects for prosperity hinge in large part on the increase in capital investment, both public and private, and the productive use of that investment.

On the other side of the world, Australia is experiencing an accelerating decline in its domestic manufacturing sector that, if unchecked, could transform the economy. In *Australia's ailing manufacturing sector seeks a cure*, Bree Neff details the cyclical and structural problems that have led to declining output and profitability in recent years. Structural reforms are required that will increase the value-add of Australia's manufactured products, coupled with increased investment in both human and physical capital.

Brazil has been one of the most prominent emerging markets in the past decade, but in June 2014 the country sank into recession and now faces rising inflation and mounting government deficits. In his article, Rafael Amiel details the country's fall from high single-digit GDP growth and outlines the necessary steps the country must take to return to growth. On the heels of a national election in October, the incoming government's primary mission will be to restore investor confidence.

Whether it is Asia, Europe, North America, or South America, the mission of IHS Economics is to provide deep insight, data, and expertise on economic challenges to help global businesses manage risk and make informed decisions that improve their competitive advantage. That is what our global team of analysts and economists focuses on every day.

CONTENTS

VISION
Risks on many fronts
By Zbyszko Tabernacki
P3

INSIGHTS
Globalization, demography, and the year 2040
By Elisabeth Waelbroeck-Rocha
P5

The aging labor force and challenges to short-term growth
By Doug Handler
P6

Outlook gloomy as Argentina enters default…again
By Paula Diosquez-Rice
P7

FEATURES
WHAT WILL IT TAKE FOR BRAZIL'S ECONOMY TO (RE)EMERGE?
For much of the past decade, Brazil has enjoyed status as one of the world's pre-eminent emerging economies. But recently growth has stagnated. What reforms are required to revive the world's seventh-largest economy?
By Rafael Amiel
P8

ECONOMIC DIVERGENCE IN CENTRAL EUROPE
The four Central European countries are struggling to bridge the income gap with Western Europe and balance regional growth domestically. What are their options for accelerating growth and reaching parity with their Western neighbors?
By Sharon Fisher
P12

AUSTRALIA'S AILING MANUFACTURING SECTOR SEEKS A CURE
The demise of Australia's automobile industry emphasizes the broader struggle of the country's manufacturing sector. A modest recovery for the sector is in sight, but its strength will depend on adding more value and much-needed capital investments.
By Bree Neff
P18

NUMBERS
Metrics that matter
Source: IHS
P22

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Globalization, demography, and the year 2040

The year 2040 seems far away, yet a view 25 years into the future is a necessary planning horizon for many organizations. Forecasting out that far, however, requires humility and an understanding of the magnitude of change that is possible. To appreciate what the future may hold, it is instructive to look back 25 years.

In November 1989, the Berlin Wall came down and the Cold War started to dissipate. Asia's four tigers—Hong Kong, Singapore, South Korea, and Taiwan—were roaring. China—the emerging dragon—was barely on the radar. A currency that would unite Europe was a decade out. But an internet that would unite the world was just a few short years away.

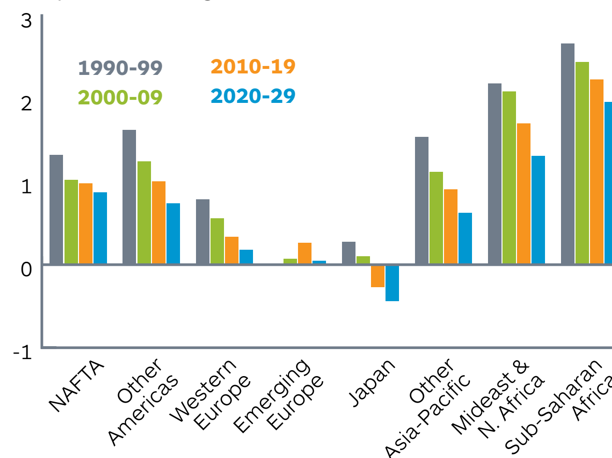
Fast forward to 2014. The world has been transformed by technology and trade liberalization. But instead of eradicating business cycles—yes, this was postulated in the 1990s—they did the opposite. First came the bursting of the internet bubble in 2001, followed by the Great Recession of 2008–09, and a still-uncertain recovery in 2014. Indeed, there is more uncertainty and stronger aversion to risk than ever, plus more political and social unrest around the world. On the positive side of the ledger, there is less concern about energy security. And the gap between emerging and developed markets is starting to narrow.

Many factors—most unpredictable—will impact the world economy in the next 25 years. However, two lend themselves to plausible scenario analysis: demographics and globalization.

Demographically, the data suggests population growth is slowing in the Americas, Europe, the Middle East, and Africa. Japan's population is actually shrinking (see figure). Within a generation, these shifts will realign consumer behavior, impact attitudes toward risk, slow the diffusion of innovation, and change the GDP growth trajectories of nations—in some cases profoundly.

The unevenness of the demographic changes means globalization trends will also shift. By taking advantage of trade liberalization, companies have redistributed production around the world, lowering costs; restructured value chains and supply chains; and penetrated new markets. In the coming decades, increased geopolitical and supply risks, climate change, the slow pace of reforms in emerging countries, and changes in demand will impact the volume and direction of trade, with spillover effects on growth and employment.

Population declines around the world have long-term economic implications



Source: IHS

While the magnitude and direction of the effects in 2040 are unknowable, one thing is certain: the balance of power will change. Decisions made today—by businesses, consumers, and policymakers—will shape the future in different ways.

Scenario analysis is becoming more important than ever.

By Elisabeth Waelbroeck-Rocha,
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The aging labor force and challenges to short-term growth

There is a battle brewing between two opposing forces—demography and productivity—that will determine global economic growth over the next five years. Demography is shorthand for the aging labor force and slowing population growth that are occurring around the world. As the labor force shrinks, and employment growth slows, employers will retain their best employees and provide tools and training for them to become more efficient. The hope is that these productivity-enhancing investments will offset the reduction in productivity from the smaller workforce.

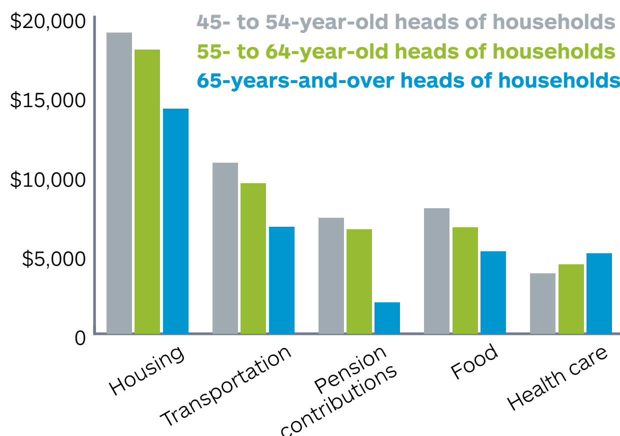
The size of the labor force is expected to shrink in China and Japan over the next five years. In Europe, growth in the labor force will slow by 32% from an annual average of 827,000 between 2009 and 2013 to 564,000 between 2014 and 2019. In the US, employment growth in the second half of the decade is projected to lag production growth. Weaker US household formation is already impacting the housing market and home price appreciation.

Typically, employment rates fall as workers pass 55, due mostly to retirement but also to structural issues such as skills gaps. With slower labor force growth, labor markets tighten, raising the specter of wage inflation and prompting central banks to tighten monetary policy. This leads to higher interest rates that put the brakes on economic growth.

Consumer-based businesses will have to adjust to shifting income and consumption patterns as households age. In the US, the peak earnings period occurs among 45- to 54-year-old heads of households at an average of $78,500, according to the US Bureau of Labor Statistics. This falls to $75,500 for 55- to 64-year-olds and $52,500 for 65- to 74-year-olds. The $26,000 cumulative drop in income translates into a $13,400 drop in outlays; about one-third of this is in the form of reduced pension contributions. Most of the remainder is reduced spending on housing, transportation, and food (see figure). Higher health care costs, mostly insurance, account for an additional $1,600. While these aging trends are relatively ubiquitous across developed countries, the specific shifts in spending vary by country based on government-provided social services and other factors.

As households age, income and consumption patterns shift

Average annual US spending by head-of-household age groups by category, 2013



Source: 2013 Consumer Expenditure Survey, US Bureau of Labor Statistics

Can productivity gains offset the demographic losses within the next five years? Will younger employees be as productive as they step in to replace their retiring colleagues? Can economies transform themselves to be driven more by business spending than consumer spending? And can technology investment produce productivity gains that will offset the demographic drag on the economy?

To answer "yes" to any of these questions—and achieve maximum gains through 2019—requires investment now. Without it, demography will trump productivity and pull global economic growth down.

By Doug Handler, chief economist, North America, IHS Economics

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Outlook gloomy as Argentina enters default...again

Argentina missed a debt service payment on June 30 and technically defaulted a month later—for the second time since 2001. The situation arose after a New York judge prevented a $539 million interest payment to bondholders unless investors holding out for a better deal on its earlier default were also paid.

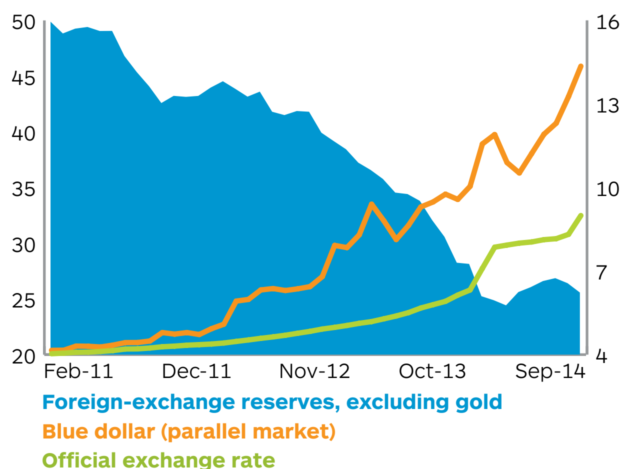
The default decision was followed by erratic and domestic-audience-tailored combative rhetoric from the Argentine government that was reflected in the ups and downs of the exchange rate in the parallel market known as the "blue dollar." The government's handling of what is ultimately a bilateral dispute between a subset of holdouts and the country of Argentina has deepened the confidence crisis in its economic situation and in the policymaking abilities of the current administration, headed by President Cristina Fernández de Kirchner.

In early September, the Argentine Congress passed legislation offering creditors of exchange bonds (restructured in 2005 and 2010 to pay roughly 35 cents on the dollar) a debt swap involving a change of jurisdiction from New York to Buenos Aires via creation of a new fiduciary agent in Argentina. The law proposes a voluntary exchange for bonds with the same nominal value and currency denomination and authorizes an alternative voluntary debt swap for bonds under French legislation and jurisdiction. In either case, however, Argentina will continue to be in default in the short term, since each would require the approval and participation of a majority of hundreds of diverse bondholders, which thus far has not materialized.

The government has not yet returned to the bond market four years after the most recent debt exchange with bond holdouts concluded. Fiscal balances are back in negative territory, and the administration lacks financing sources to cover an increasing public deficit. Its revealed preference is to preserve the country's foreign-exchange reserves, since they are the principal source of funding beyond their currently insufficient fiscal revenues. Its lack of access to external markets for financing at reasonable rates suggests the government may need to explore ways to raise revenues to tackle its hefty fiscal spending program and debt service burden.

Double trouble: Foreign-exchange reserves and the Argentine peso both tumble

Left scale: foreign-exchange reserves (US$ billions); right scale: official and 'blue dollar' exchange rates (Argentine pesos per US dollar), February 2011-September 2014



Source: IHS

In recent years, the government's protectionist economic policies, which have included heightened import barriers and increased foreign-exchange controls, have widened the gap between the parallel-market exchange rate and the official exchange rate and in turn reduced incentives for the exporting sector to increase production. More recently, modifications to the country's "supply" law imply a high risk of government intervention in private business operations to cap prices and set production levels and profit margins.

The net effects of this near-sighted and erratic policymaking are to increase the country's operational risks and delay new investment decisions—as well as prospects for an improved economic climate—until after the October 2015 presidential election.

By Paula Diosquez-Rice, principal economist, IHS Economics

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What will it take for Brazil's economy to (re)emerge?

For much of the past decade, Brazil has enjoyed status as one of the world's pre-eminent emerging economies. As recently as 2010, its GDP grew 7.5%. Since then, growth has stagnated amid rising inflation and widening deficits. What reforms are required to revive the world's seventh-largest economy?

By Rafael Amiel

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Brazil officially entered into recession in June, after figures showed GDP for Q2 2014 had fallen 0.6% from the previous quarter. The downturn is a major disappointment for Brazilians with high expectations engendered by the blistering growth a few years ago that made their country a leader among emerging markets.

The world caught its first glimpse of economic tensions building inside Brazil during the 2013 FIFA Confederations Cup, when protestors took to the streets across the country to express discontent with the government's management of the economy as well as its expenditure of public money to host the World Cup the following year. That set the stage for the country's October 2014 presidential election, in which—while the results were unknown at the time of publication—the weakening economy was the central issue.

Regardless of the winner, the key question is whether Brazilian businesses and investors will regain confidence in their government—the first requirement for restoring growth. To that end, the incoming administration will be challenged to control inflation effectively and remove structural obstacles to allow Brazil to recapture some of the robust growth it enjoyed during the 2010 boom, when the economy expanded 7.5%.

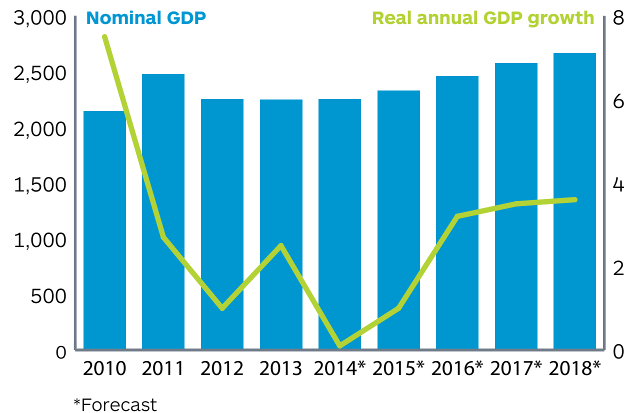
Today, the country's industrial production is plummeting in response to weak domestic demand and slowing global growth—China buys the largest share of Brazil's exports—coupled with capacity that already exceeds demand. In the first seven months of 2014, Brazil's production declined 2.8% compared with the same period a year earlier.

Moreover, the labor market began to erode noticeably in February, as retailers, builders, and automakers cut jobs. While Brazil's unemployment rate—4.9% in April, the most recent figure available—actually has been declining for several years, it reflects the fact that many Brazilians have given up looking for work and left the labor force.

In recent weeks, IHS has become less optimistic about Brazil's short-to-medium-term economic outlook. South America's largest economy is forecast to continue languishing in the coming months and record growth of 0.1% for 2014, followed by a modest recovery in 2015 to 1-1.3% growth. IHS' current forecast calls for growth of above 3% in both 2016 and 2017.

Has Brazil's economy bottomed out?

Left scale: nominal GDP (US$ billions);
right scale: real annual GDP growth (%), 2010-2018



Mismatched monetary and fiscal policy

Business confidence in the government's ability to steer the economy has been badly eroded due to its contradictory mix of loose fiscal management and an ostensibly tight monetary policy. Brazil's central bank has increased interest rates nine times over the past year and a half. The high, albeit appropriate, reference interest rate of 11%—up from 7.25% in April 2013—is one of the world's highest.

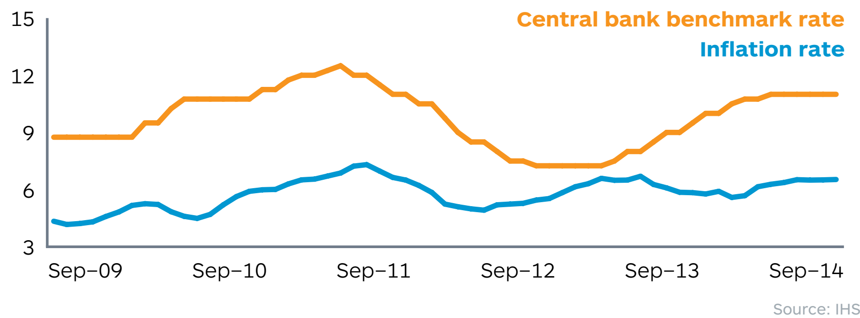
> While Brazil is South America's largest economy, its infrastructure remains decidedly third-world.

Yet high inflation persists in Brazil. IHS forecasts that it will hover near 6.5% over the next year, pushing at the upper edge of the central bank's target rate of 4.5% (plus or minus two percentage points).

The central bank has failed to control inflation because it has played a more ambiguous policy game than its high interest rate might suggest, which has eaten away at private sector confidence. At the same time that it has raised rates, the bank simultaneously has encouraged liquidity and expanded credit by subsidizing bank lending, lowering reserve requirements for banks, and allowing more leverage on capital. Unless the central bank takes aggressive measures to control the growth of domestic credit, inflation will remain high (see figure next page).

Creeping inflation will pressure the central bank to keep interest rates high

Brazil's Selic benchmark rate compared with the country's inflation rate (%), 2009-2014



The government's failure in recent years to hold spending to a pace consistent with revenue has further undermined private sector confidence. Since the economy faltered in 2011, policy has focused on tax cuts and low-cost, subsidized financing for investment. Government payrolls have continued to increase due to generous inflation indexing of workers' wages. One result of this is the social security administration is in deficit and operating on a cash-only basis, its steep debt payments due to high interest rates further draining federal coffers.

The Rousseff government had committed to running a primary fiscal surplus for 2014 equivalent to 1.9% of GDP. While this might be achievable with the help of creative accounting, the overall fiscal balance will be a deficit equal to about 3.5% of GDP, including payments of interest on the government debt. Once again, inflation is key: more prudent fiscal policies would take some pressure off monetary policy, allowing it to become less restrictive to promote growth.

In September, Moody's Investors Service downgraded the government's bond rating, bringing it closer in line with IHS' sentiment. The downgrade was partly a response to an increase in debt to fund lending by state-owned banks, as Brazil's private sector financial institutions have cut back.

High costs hurt competitiveness

Brazil also wrestles with structural problems that were concealed by the boom and have now been revealed as economic growth has ground to a halt. These entrenched problems, many of them the result of initiatives of the country's interventionist, left-leaning governments of the past decade, drag down its growth prospects.

Among Brazil's primary structural challenges are the following:

Rising labor costs. Minimum wages are adjusted every year by a percentage equal to the previous year's inflation rate plus the rate of GDP growth from two years earlier. This indexation is a wildly popular policy responsible for lifting millions of Brazilians out of poverty over the past decade. But the dilemma for policymakers is that indexed wages now seem unsustainable in the current era of inflation—which the rising wages will exacerbate—combined with slow or no growth.

High cost of doing business. Brazilian economic and social policies historically have been criticized for creating very high costs that damage business confidence as well as industrial competitiveness on the global stage. The government's intervention takes many forms, including an overvalued currency, extremely high interest rates on business loans, high taxes that conceal the costs of Brazil's large public sector bureaucracy, high utility costs, and high labor costs.

Domestic sourcing. Laws requiring certain manufacturers and ventures to use Brazilian workers and inputs exclusively have hampered growth in some sectors of the economy. The agricultural sector, for example, pays more than the prices set on the international market for the locally produced fertilizers, chemicals, and machinery it must buy. Development of offshore oil rigs in the Atlantic Ocean has also been slowed by the lack of access to basic supplies such as pipes, water trucks, and drilling equipment.

Further constraints on Brazil's economy include the government bureaucracy's excessive red tape for private projects, an overly complicated tax system, corruption, insufficient investment in infrastructure, and an inadequate educational system.

Politically viable reform

The nature of Brazil's politics limits what can or will be done to implement policies that might slow the growth of public sector wages or curb recent expansions of popular social programs credited with slashing poverty. Protests during the Confederations Cup for higher wages and better public services make that clear.

But the incoming administration may be able to seize on its election victory to modify some of the existing policies that are inhibiting economic growth. Three initiatives that could conceivably garner support in Brazil's multi-party system are the following:

Fight inflation upfront. The new administration has little choice but to appoint a new central bank president and board if it is to restore the bank's badly damaged credibility and send a strong message that it will control inflation. This would have been an unpopular move in the midst of a presidential campaign, but it is one that is now prerequisite for sustained economic growth.

Examine fiscal accounts. Following the election, the administration will enjoy a honeymoon period during which it may be able to seek and obtain compromises, carrying out programs demanded by the electorate while exercising more fiscal restraint and approaching difficult issues such as wage indexation or public-private partnerships for infrastructure projects.

Build infrastructure. While Brazil is South America's largest economy, its infrastructure remains decidedly third-world. To encourage private investment, the nation needs roads, seaports, airports, and hydroelectric power. Yet government funds for new infrastructure are limited, and public skepticism about turning over responsibility for the nation's infrastructure to private industry runs deep. An ambitious public-private partnership to build a high-speed rail to connect Sao Paulo with Rio de Janeiro, for example, has been plagued by cancellations, redesigns, and delays.

The incoming administration may be able to convince the public to support hybrid government-private partnerships, such as those pursued in the management of several of Brazil's airports. Private investors in recent years have financed renovations and expansions of airports in Rio de Janeiro and Sao Paulo under government agreements that give them the rights to profits for a predetermined time period, after which the contracts may be renegotiated or the airports turned back to government control.

Outlook

Brazil's economic fundamentals are remarkable for an emerging market. The country has an abundance of natural and mineral resources as well as a solid manufacturing foundation. It has a sound industrial policy and remains a regional economic force.

Brazil: Intermediate investment risk

Outlook for investors across six risk criteria as of September 2014; 1 = minimum risk, 5 = maximum risk

Risk	Factors weighed	Score	Rating
Political	Institutional permanence; representation of the population and organized interests; internal and external political consensus	2.5	Medium
Economic	Degree of market orientation; policy consistency and forward planning; diversity and resilience of the economy; macroeconomic fundamentals	2.5	Medium
Legal	Transparency of legal procedures; independence and impartiality; experience and quality of legal system	2.5	Medium
Tax	Coherence of the taxation system; fairness of taxation burden; relative level of taxation; effectiveness of tax collection	**3**	**Significant**
Operational	Attitudes to foreign investment; infrastructure quality; labor conditions; bureaucracy and corruption	**3**	**Significant**
Security	Civil unrest; crime rate; terrorism risk; external security threats	2.75	Medium
Overall	Weighted average of all risk categories	**2.66**	**Medium**

Source: IHS

Agricultural and commodity exports, which dropped in previous years, are recovering, a trend that IHS expects to continue into 2015. The diversity of its producing sector provides an important hedge against the major crises that characterize other developing economies too heavily dependent on one or two industries' fortunes.

However, the Brazilian economy has been on a bumpy ride for more than three years. Highly leveraged consumers are still trying to reduce the burdensome debt payments they incurred during the economic boom and cannot be counted on to pull the economy out of its current gloom. Prospects for business investment, currently very poor, will prove critical to Brazil's ability to rebound over the longer term.

If the incoming Brazilian government seizes the opportunity to change direction in key policy areas and restore business confidence, it may yet be able to change the troubled dynamics of the country's economy.

Rafael Amiel is director, Latin America Economics, IHS Economics

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Economic divergence in Central Europe:

How will the region catch up?

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The four countries of Central Europe are struggling to bridge the income gap with Western Europe and balance regional growth domestically. Their success depends on a few critical factors.

By Sharon Fisher

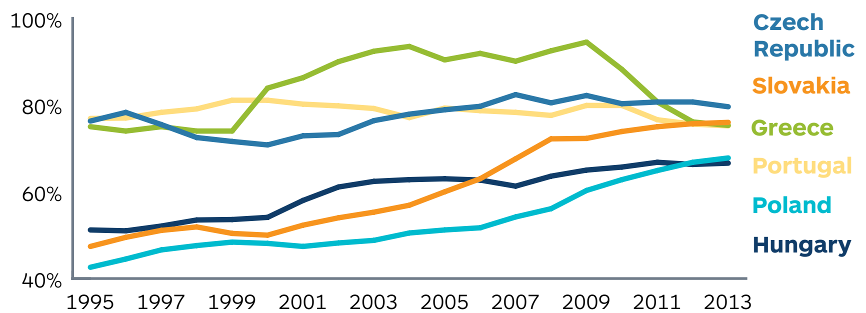
When the first post-communist countries joined the European Union in 2004, there was a general mood of euphoria in the region. Many Central European citizens equated the EU with wealth and a strong social safety net. Ten years after joining, the four Visegrad Group (V4) countries (Poland, the Czech Republic, Hungary, and Slovakia) are undoubtedly better off than they would have been without the EU. Nevertheless, the pace of their convergence with richer Western European countries has slowed considerably since the 2008-09 Great Recession and the subsequent Eurozone debt drama.

The V4 countries have made considerable progress in converging toward the EU average per capita GDP. The convergence started even before EU accession, as investors moved into the region to take advantage of the closer ties with Western Europe and the improved legal frameworks that were then emerging. Data from Eurostat using purchasing power standards (PPS) indicate that the pace of convergence was rapid between 2000 and 2008, when the average rate of GDP growth in the four Central European countries reached more than 4% annually. Since then, the rate of convergence has slowed everywhere except in Poland, which was the only EU country to escape recession in 2009. Of the four countries, Slovakia and Poland have progressed the furthest since 1995, while the Czech Republic has seen the slowest pace of convergence, partly because the country started at a much higher level of GDP per capita than its regional peers.

In a sign that the lines between old and new member states are gradually shifting, by 2013 GDP per capita in both the Czech Republic and Slovakia had surpassed that of Greece and Portugal (see graph below). Nevertheless, that is partly a reflection of the poor recent economic performance in the latter countries. Poland and Hungary remain behind.

The gap between old and new EU members is starting to converge

GDP per capita in purchasing power standard terms, EU28=100%



Source: Eurostat

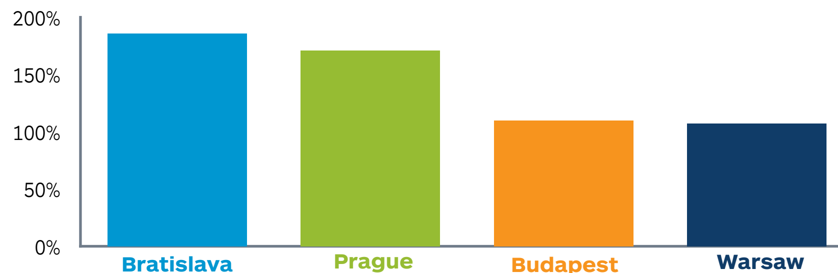
Regional divergence

Despite the progress of the V4 countries, all suffer from severe economic divergence within their own borders, with the poorest regions generally located in the east and the richest around the capital cities (see graph on page 14). In fact, 2011 data (the most recent available) indicate that the capitals are the only regions in the four countries where GDP per capita stands above the EU28 average. The figures are especially high in Bratislava

and Prague, due in part to commuters who live outside the region but work in the capital cities. The regions that include Warsaw and Budapest are larger than those for the other two cities, making commuting to the capitals from outside the region less common.

GDP per capita in the V4 capital regions exceeds EU average

2011 GDP per capita in purchasing power standard terms, EU28=100%



Source: Eurostat

Central European countries will have to take steps to ensure a continuation of rapid investment growth if they hope to promote continued convergence.

Aside from the capitals, no other region in Central Europe comes anywhere close to the EU average per capita GDP (see map at right), with the next-highest region (the area surrounding Wrocław in Poland) reaching just 74% of the EU average. Six Central European regions achieve 70-73% of the EU average, including four in the Czech Republic (Central Bohemia, as well as the regions around Brno, Plzen, and Ostrava), one in Slovakia (Western Slovakia), and one in Poland (Katowice). Nine regions in Poland and Hungary have a GDP per capita that is less than 50% of the EU average, the poorest of which is the region around Miskolc in eastern Hungary at 40%.

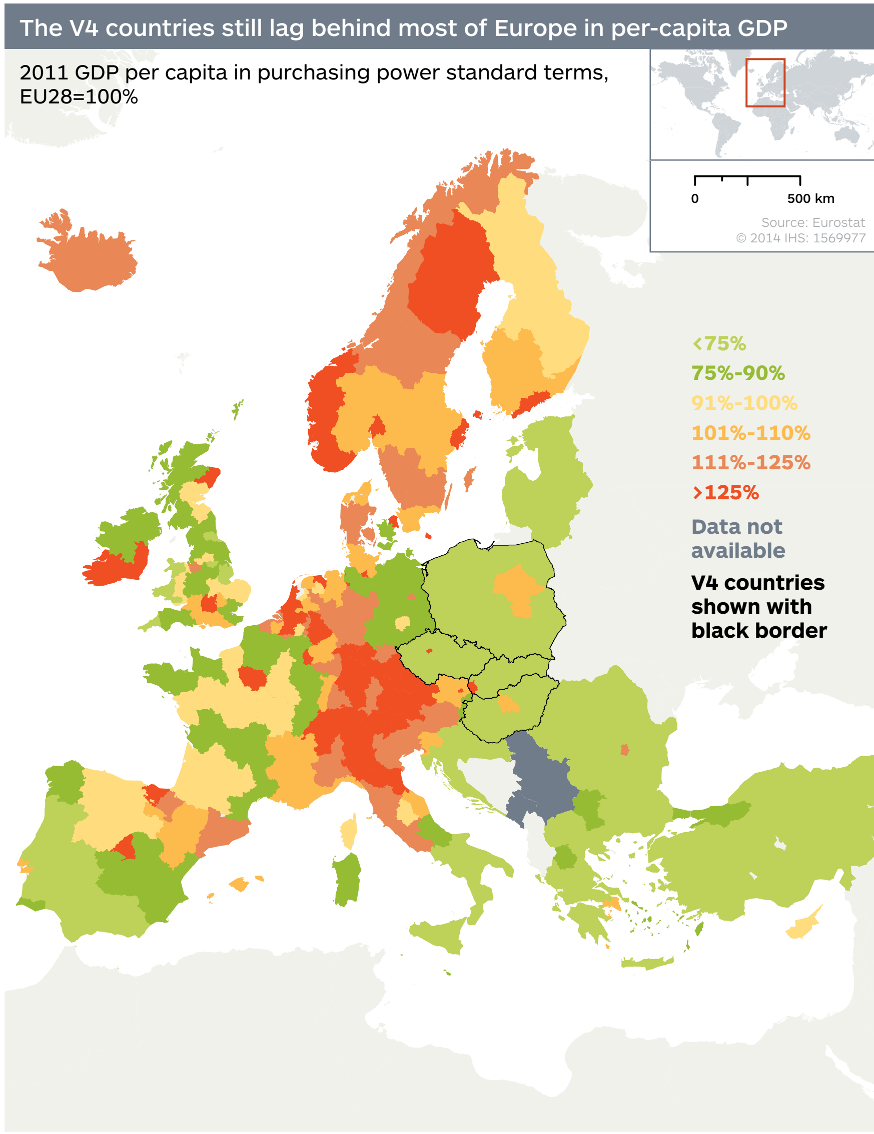
Unemployment rates, education levels, and wages also vary significantly among regions. Eurostat data indicate that the region with the highest unemployment rate in 2013 was Eastern Slovakia, which includes the towns of Košice and Prešov, at 18.5%. The lowest rate was in Prague at just 3.1%.

Is convergence likely?

Overall, the four Central European countries are expected to significantly outperform the EU average during the next five years, signaling that convergence will continue. Growth will also be more balanced than in the post-2009 period as domestic demand recovers. Nevertheless, it is unlikely that the pace of growth seen before the 2008-09 crisis will return. One factor slowing the pace of future convergence is the higher level of development in present-day Central Europe compared to a decade ago, meaning that the countries are starting from a higher base. From a policy perspective, the Central European countries will have to take steps to ensure a continuation of rapid investment growth if they hope to promote continued convergence—whether from EU funds, public investment, or private investment.

EU funds as a driver of convergence

During the next seven years, EU funds aimed at promoting growth in the least-developed countries and regions will provide a key boost to Central Europe. Indeed, one European bank suggested that structural and



The V4 countries still lag behind most of Europe in per-capita GDP

2011 GDP per capita in purchasing power standard terms, EU28=100%

investment funds earmarked for Central and Eastern Europe in the EU's 2014-20 budget could serve as a stimulus similar to the Marshall Plan for Western Europe after World War II.

The total allocation planned for all EU countries is 351.9 billion euros, up 1.3% in nominal terms over the 2007-13 budget. The V4 countries combined were allotted 135.4 billion euros, about 38% of the total EU budget and 4.1% higher than during the 2007-13 budget period. Not all V4 countries will benefit equally; Poland and Slovakia are the clear winners. In fact, Poland will receive more funds than any other EU member state, while Slovakia has been granted the second-highest allocation per capita after Estonia (see table below left).

If the four countries use their EU funds wisely, these inflows could contribute to faster convergence while helping to improve the business environment and reduce income inequality. Nevertheless, based on their track record, there are several reasons why this may not happen. One reason is that EU funds have often been subject to political influence and corruption. Moreover, in the post-2009 period most governments in Europe have been struggling to bring fiscal deficits under control, making it difficult to provide the necessary co-financing for EU-funded projects. All four countries have experienced in the past temporary suspensions of EU funds for reasons that include administrative errors, doctored audits, financial irregularities, and suspected fraud. As a result, the absorption rate of EU funds has been low.

Poland had one of the best absorption rates of EU funds in Central and Eastern Europe during the 2007-13 EU budget period, behind only Estonia and Lithuania, according to an Erste Bank report from March 2014 (see table on page 16). Nevertheless, the country managed to use only about 68% of available funds during that period.

Slovakia and Poland are clear winners in allocation of EU Cohesion Funds for 2014–2020

	Total allocation, 2014-2020 (bil. euros)	Change over 2007-2013 level	2013 population (mil.)	Per-capita allocation (euros)	2013 GDP per capita (% of EU average)
EU, total	351.9	1.3%	505.7	700	100.0
V4, total	135.4	4.1%	64.4	2,100	NA
Slovakia	14.0	21.7%	5.4	2,600	76.0
Poland	77.6	15.4%	38.5	2,000	67.8
Hungary	21.9	-12.0%	9.9	2,200	66.6
Czech Republic	22.0	-17.0%	10.5	2,100	79.6

Source: IHS

Poland leads the V4 in absorption of funds from EU's 2007-2013 budget

Member state	Total allocation (bil. euros)	Total payments (bil. euros)	Absorption rate
Czech Republic	26.5	13.6	51.1%
Hungary	24.9	14.8	59.3%
Poland	67.2	45.6	67.9%
Slovakia	11.5	6.0	52.6%

Source: Erste Bank, provisional data

The other three V4 countries absorbed just 51%-59% of available funds, with the Czech Republic the worst performer as a result of an unstable public administration and a complicated implementation system. The EU allows countries an extra two to three years to use funds from the 2007-13 budget period, so the rates may change.

In the coming years, however, Central European countries will have to take steps to increase their absorption capacity by adopting a simpler implementation system, decreasing government bureaucracy, providing more transparency in the process of project selection to clamp down on corruption, and engaging in wider cooperation with commercial banks to ensure that projects receive bank financing.

In addition to raising absorption rates, the four countries must also ensure that EU funding is directed to the right kinds of projects, with the aim of spurring growth and accelerating the pace of development. Projects eligible for funding include the following:

- Infrastructure (transportation, telecommunications, and energy)
- Human capital (education and training, promoting labor mobility and social inclusion, and reducing long-term and youth unemployment)
- Environment (energy efficiency, renewables, and public transport)
- Innovation and research
- Small and medium-sized enterprises (SMEs)

Studies have shown transfers that raise investment have the most significant impact on convergence, particularly when focused on human capital, infrastructure, and research and development. These transfers incentivize private investment by triggering increases in labor supply and productivity and improving the overall business environment. The productivity-enhancing effects of these transfers result in permanent gains in output, even after the funding is discontinued. Moreover, the positive impact on tax revenue helps contribute to a decline in government debt. In contrast, transfers that serve to boost household income have been shown to have the smallest effect on convergence and are viewed as wasteful.

Investments in human capital

Aside from infrastructure, investments in human capital rank among the most beneficial uses of EU funds. Wages in all four Visegrad countries remain well below the EU average, meaning outward migration will continue until better-paying jobs become available. Outward migration is expected to be especially severe in the poorer and less-developed regions. This "brain drain" is particularly problematic for investors, since it is often younger, more educated citizens who move abroad.

Already, firms in some sectors have complained about the lack of skilled labor, and many young people in the region are choosing a general education path for high school rather than the vocational programs demanded by businesses. Another problem relates to the quality of teaching. As communist-era teachers retire, it is becoming difficult to attract new teachers to replace them, especially in light of the low public sector wages.

One way to prevent labor migration is to improve local education and training programs. In Slovakia, for instance, the German, Swiss, and Austrian chambers of commerce have recently taken steps to introduce a dual education system, which provides cooperation between vocational schools and businesses and enables the expansion of practical education for students within companies. These programs will help promote more focused education that is better suited to the available job opportunities while reducing Slovakia's high youth unemployment rates and keeping young people from leaving home in search of work.

Not all V4 educational policies have been effective in improving the investment environment, however. In Hungary, the government introduced a rule in 2012 requiring students to work in the country for at least two years for each year of state-subsidized university education they received. While this approach may help reduce brain

drain, it has done nothing to address the possible skills mismatch.

Programs aimed at increasing the employment rate could also contribute to faster growth. Indeed, in 2013 the employment rate for all V4 countries except the Czech Republic was below the EU average (see table below). Even in the Czech Republic, the rate was below the EU's target of 75%. Meanwhile, the high unemployment rates in Hungary, Poland, and Slovakia indicate considerable room for improvement, particularly among the young.

Attracting private investment

If used properly, the V4 countries' EU funds through 2020 will help boost the attractiveness of the region as an investment destination. Nevertheless, the competition for foreign investment is likely to be tough, as potential investors weigh factors such as wages, tax rates, transportation links, labor availability, and energy costs. In some cases, investors looking at Central and Eastern Europe are choosing countries outside the EU, such as Serbia, that have lower wages and governments willing to offer more attractive incentives than are allowed in the EU.

The ability of Central European countries to offer investment incentives is rather limited, although EU regulations are more lenient regarding incentives for SMEs and for operations in lesser-developed regions. For example, in Slovakia investment incentives are targeted at regions with higher-than-average unemployment rates, and the minimum investment for SMEs is half of that required for larger enterprises. In Slovakia's industrial sector, new projects receiving incentives must contribute to the creation of at least 40 new jobs, while incentives for existing projects must raise employment by at least 10% and increase production by at least 15%.

Given its relative wealth and low unemployment rate, the Bratislava region is excluded from Slovakia's investment incentive scheme. In contrast, the districts that allow for the highest level of incentives are located mainly in the eastern part of the country, along the Hungarian, Ukrainian, and Polish borders. From that perspective, EU funding aimed at improving north-south transportation infrastructure could be particularly useful in spurring growth and investment in the less-developed parts of the country. In all four countries, investors can benefit from tax breaks if they choose to locate in regions with higher unemployment rates; however, they may have to work with local schools to ensure adequate labor supply and training.

Looking ahead, IHS expects Poland and Slovakia to show the fastest convergence progress over the next five years, as labor force participation rates increase and the countries make better use of EU funds. Upgraded transportation and energy infrastructure, combined with improvements in education and training, will provide clear benefits for investors. In contrast, the Czech Republic may be less likely to attract the investment needed to maintain a rapid pace of growth, given the tighter labor market and potential for shortages. Hungary's problems stem from a different source, the lack of consistent and stable government policies to attract private investment. In particular, investors have been spooked by the government's recent efforts to impose higher taxes on foreign-dominated sectors and promote greater local ownership.

In order to promote faster convergence, all of the V4 countries need to increase absorption of EU funds while promoting the competitiveness and innovation needed to move up the value chain. Without such efforts, they will face challenges competing for new investments, especially as wages continue to edge upward toward the income levels of richer EU members.

Labor market indicators show significant divergence within the V4 countries (2013 data, in %)

	Employment rate, age 20-64	Share of university-educated population, age 30-34	Unemployment rate, age 15-64	Youth unemployment rate, age 15-24	Long-term unemployment (12+ months)
EU28	68.4	36.9	10.8	26.3	5.1
Czech Republic	72.5	26.7	7.0	18.9	3.0
Hungary	63.2	31.9	10.2	27.2	5.0
Poland	64.9	40.5	10.3	27.3	4.4
Slovakia	65.0	26.9	14.2	33.7	10.0

Source: Eurostat

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Australia's ailing manufacturing sector seeks a cure

The demise of Australia's automobile industry emphasizes the broader struggle of the country's manufacturing sector. A modest recovery for the sector is in sight, but its strength will depend on sector-wide reforms focused on adding value to manufacturing output, along with the capital investments needed to do so.

By Bree Neff

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Australia's manufacturing sector is in a rut, contracting in four of the past five years. During its heyday in the 1960s, manufacturing accounted for 30% of Australia's GDP. Until fiscal year 2008 (July 1, 2007–June 30, 2008), it was the largest economic sector. But by FY2013, it was only the fourth largest, accounting for just 7.1% of GDP.

The Australian manufacturing sector's decline is similar to what has occurred in other open, advanced economies, where primary and secondary sectors—agriculture, manufacturing, construction—have shrunk relative to tertiary (services) sectors (see top figure on facing page). Because capital and labor assets are relatively inflexible, such transitions can slow economic growth and boost unemployment. However, sound economic and industry-specific policies and planning can minimize disruptions to the remainder of the economy. To be successful, these policies need to address both cyclical and structural challenges the industry faces as outlined below.

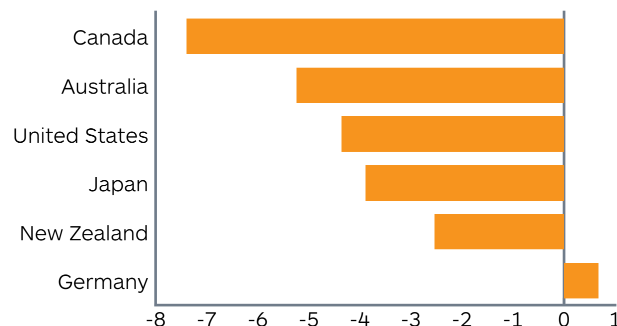
The dreaded Dutch disease undermines competitiveness

Since 2009, respondents to the Performance of Manufacturing Index survey, published by the Australian Industry Group, have complained about the strong Australian dollar. The survey results combined with manufacturing sector attrition since 2008 suggest a case of Dutch disease, in which rising foreign currency inflows cause domestic currency appreciation and a loss of price competitiveness at home and abroad.

Australia's Dutch disease stems from the decade-long mining boom that increased export revenues and foreign investment and in turn significantly boosted the value of the Australian dollar, or Aussie. Magnifying the Dutch disease problem, the Aussie received support from favorable interest rate differentials and central banks diversifying their foreign reserves. The Reserve Bank of Australia's trade-weighted Aussie index recorded a trough-to-peak

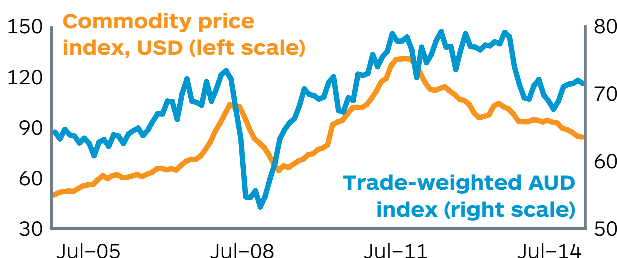
As economies mature, manufacturing's share of GDP typically declines, replaced by services

Percent change in manufacturing sector's share of country GDP, 1995-2013



Source: Statistics Canada, Australian Bureau of Statistics, US Bureau of Economic Analysis, Japan Cabinet Office, Statistics New Zealand, Bundesbank

Case study of Dutch disease: Falling commodity prices in USD terms and a strong AUD drove a steep decline in AUD revenue for Australia's metal manufacturers starting in 2011



Source: Reserve Bank of Australia

appreciation of 44.8% between January 2009 and February 2012.

Only 17% of Australian manufacturers are exporters, so import competition is a significant challenge imposed by the Aussie's appreciation. The argument for Dutch disease contagion in manufacturing is best exemplified by the rising share of imports in household goods consumption. In 2004, 22% of Australian households' consumption needs were met by imports, but by 2013 that share had climbed to 27%. As imports crowded out domestic producer sales, profitability weakened across several of Australia's manufacturing subsectors.

The largest Dutch disease-induced decline in manufacturing profitability occurred in metal manufacturing, starting in mid-2011. The strong currency limited metal manufacturers' Australian dollar revenues in two ways. First, it curtailed revenue through increased import competition for certain manufactured metals, such as aluminum. Second, metal products are priced predominantly in US dollars. So when metal commodities prices plunged by roughly 40% in US dollar terms from mid-2011 through late 2012, while the trade-weighted Aussie exchange rate appreciated modestly, the sector's per-unit Australian dollar revenues fell by more than 40% (see figure above). If the Australian currency had plunged 40%, this drop in per-unit Aussie revenues and broader profitability would have been mitigated.

The Australian dollar is unlikely to depreciate to its pre-boom levels versus the US dollar over the next few years. Investment-induced growth in Australian exports will contain current-account deficits and support foreign-exchange reserves. Additionally, IHS expects the gradual tightening of monetary policy by advanced economies will ensure investors do not flee Australia *en masse*.

Labor costs and productivity issues undercut profitability

Labor productivity is another issue holding back the manufacturing sector. Average labor productivity grew

by 1.2% between 2008 and 2013 within the sector, according to data from the Australian Bureau of Statistics (ABS). This fell short of the 2.3% rate for 1995–2008 and the broader economy's productivity growth rates of 1.8% and 2.4% for 2008–13 and 1995–2008, respectively. Even as productivity slowed following the Great Recession of 2008–09, labor-related expenditures as a share of total expenses for Australia's manufacturing sector increased from a low of 15.1% in FY2008 to 16.2% in FY2013.

Australia's labor costs are high compared with those in Asian manufacturing countries, such as Thailand and China. More significantly, Australia's compensation rates are elevated relative to other advanced economies, with the Aussie's appreciation exacerbating the situation (see figure at left below). Aside from currency appreciation, a tight labor market with an average unemployment rate of 5.1% between 2003 and 2013 led to skilled-labor shortages and broad-based wage pressures in Australia.

IHS expects Australia's near-term wage inflation pressures to ease, with the unwinding mining boom weighing on growth and preventing a quick return to full employment. Additionally, we expect the Liberal-National coalition government to advocate the use of individual wage negotiations rather than collective bargaining, further limiting wage pressures. Unfortunately for manufacturers, wage and compensation costs are not expected to fall.

Australia's embrace of free trade benefits cost-competitive sectors over manufacturing

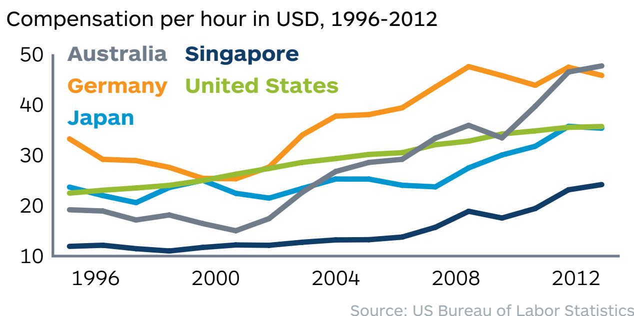
Australia's World Trade Organization membership commenced in 1995 and opened up the country's historically protected manufacturing sector to increased competition, hastening its decline. Accordingly, the ratio of Australia's imports to GDP rose steadily through the Great Recession. Initially, exports fared well in the new free-trade paradigm, including manufactured goods such as transport equipment and machinery, but these advantages were gradually eroded (see figure at right below). The government's pursuit of bilateral free-trade agreements (FTAs) further exposed the sector to import competition, with the first agreement signed with Singapore in 2003, followed by agreements with the US, Thailand, Malaysia, and Chile over the next decade.

Australia is a vocal proponent of free trade, especially as it has helped the country's more competitive primary sectors—including minerals and metals, and food products—gain access to export markets. The government remains committed to the free-trade agenda, signing FTAs with South Korea and Japan in the past year and actively negotiating agreements with China and India. Australian import-competing manufacturers must focus on upgrading the quality of their products as competition with mass-produced, lower-cost goods from major trading partners will not be possible given the sector's cost structure.

A sparsely populated continent struggles with economies of scale

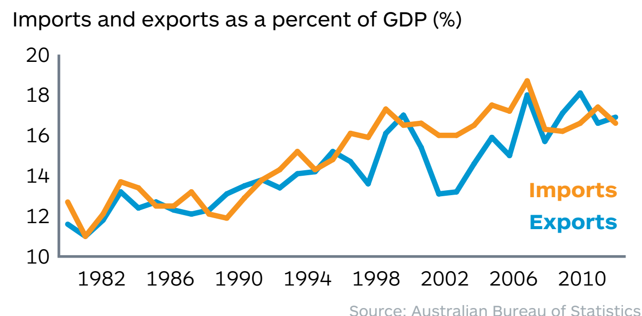
Another issue for Australian manufacturers is the country's geography, with 60% of the population in the coastal capital cities, most of which are thousands of kilometers apart. Because of this, manufacturers struggle to take advantage of economies of scale. Accordingly, manufacturing activity is dominated by small and medium-sized enterprises (SMEs), with 46% of Australian manufacturers reporting annual revenue of under AUD200,000 in FY2013 and 92% employing fewer than 20 people. Consequently, 80% of Australian manufacturers produce and sell their goods primarily for their local market, and the geographical distribution of

Australia's compensation costs have risen significantly in USD terms compared to other advanced economies



Source: US Bureau of Labor Statistics

Trade increased after Australia joined the WTO in 1995, but low-cost imports and high-priced exports took a toll on manufacturing in the 2000s



Source: Australian Bureau of Statistics

manufacturers by state closely aligns with each state's respective share of Australia's overall population (see figure at right). Only 44% of manufacturers sell their goods outside their local market but within Australia.

Improved transportation infrastructure, which enables better interstate trade, would facilitate some consolidation and improved economies of scale. However, overcoming decades-old brand loyalty and re-engineering supply chains will prove costly.

Manufacturing must evolve to maintain its place in the economy

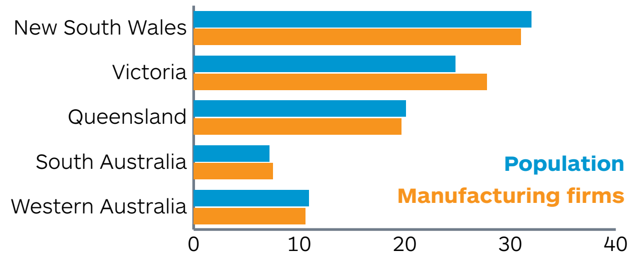
Following three consecutive years of contracting manufacturing output, the sector is approaching a turning point where output will stabilize and return to modest growth. This is because high-cost companies that have not yet failed could fold soon while the more critical and competitive manufacturers remain in business. Additionally, Australia will maintain a base level of manufacturing because it is not economically viable to import such items as fresh-baked bread or iron ore pellets. Setting the course for a stronger recovery, however, requires government and industry collaboration on a set of critical initiatives.

Australia's manufacturing strengths are likely to remain concentrated in low-value-added sectors such as food products, and metals and minerals, if only because they can be produced in abundance in the sparsely populated country. One course of action is for Australian manufacturing to shift toward more technologically advanced manufacturing; however, firms will likely need enticements to carry out the necessary research and development. Regrettably, despite promises to boost investment incentives, budget problems forced the government to reduce available R&D tax offsets in the 2014 budget. Still, the strong Australian dollar has reduced the cost of capital goods imports compared with a decade ago, creating new opportunities for capital investment. Firms can also work with Australia's national science agency, the Commonwealth Scientific and Industrial Research Organisation, on new product and process innovations.

Advocates such as the Australian Industry Group have been calling on manufacturing firms to diversify their businesses to provide the services around the creation, distribution, and life cycle of the goods they produce. This would mean less production of physical goods, potentially boosting profitability, as such services do

Geographical dispersion of Australia's manufacturers by state virtually mirrors each state's share of the overall population

Population and number of manufacturing companies as a percent of total (%) in Australia's largest states



Source: Australian Bureau of Statistics

not require costly material inputs. To either provide more services for manufactured products, or create more advanced goods with technologically advanced equipment, labor upskilling is needed. According to 2012 census data from the ABS, the educational background of 45% of the manufacturing workforce stops at the high school-equivalent level. Increased focus on either advanced manufacturing or complementary services, without labor upskilling, will boost unemployment.

Considering the domestic focus of the country's largely SME manufacturers, improving infrastructure nationwide would reduce transportation costs and times, facilitate broader interstate trade, and potentially improve economies of scale. The current government has several initiatives in place to encourage infrastructure investment at the state and federal levels, but it will take time to benefit the manufacturing sector.

Inevitably, shifts in approach are likely to evolve slowly and require businesses to become more receptive to technology changes used in production processes. However, if structural adjustments to business models are made and new investments are forthcoming, Australia's manufacturing sector could see stronger-than-expected performance over the longer term.

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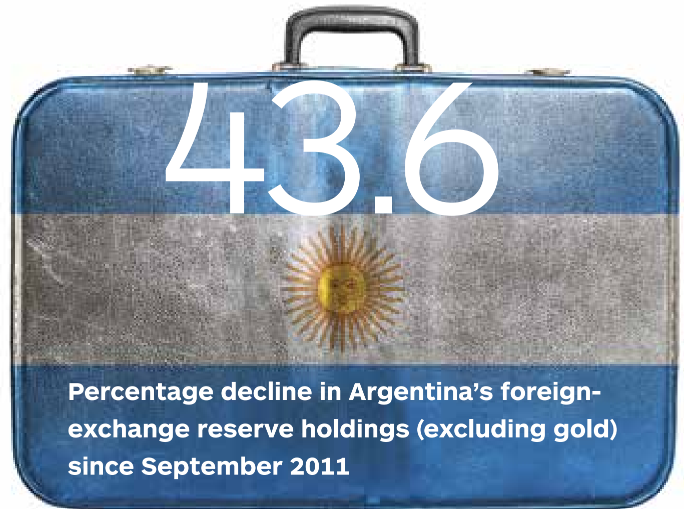

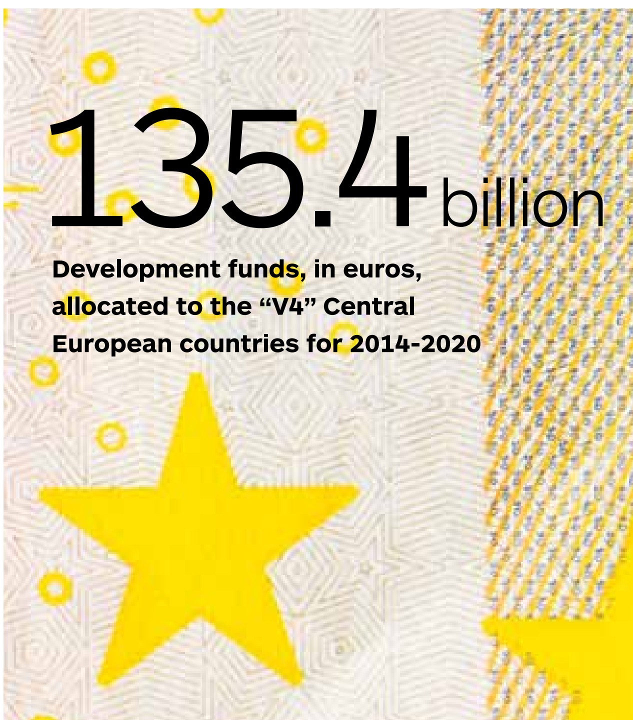

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