

The drupa logo consists of the word "drupa" in a bold, lowercase, sans-serif font, positioned on a red background that features a white grid pattern of small squares.

# Global Trends



## 3rd drupa Global Trends report 2016 Executive Summary

### Introduction

Welcome to the executive summary of our 3rd drupa Global Trends report, tracking key economic and market developments in the global print industry over the crucial period leading to drupa 2016 and beyond. This is based on a survey conducted in October 2015 in which almost 1250 participants took part globally with all regions well represented. Our thanks must go to them all for their time.

As last year we circulated two separate surveys for printers and suppliers, sharing some questions with the printers, but also asking other more specific questions relevant to each group. 892 printers participated in October 2015 and whilst a majority were from Europe (552), the rest of the world was well represented in all regions (340). Given the relatively smaller number of suppliers, we were pleased to get responses from 355 of which 216 were from Europe, but again all the other regions were well represented.

The Global Trends reports are complemented by drupa's Global Insights reports, the second of which was published in November 2015 - *Touch the future - Applications that can create growth* (available from the drupa website). Messe Düsseldorf, in its role as drupa organiser, must thank our two partners for conducting and authoring these two report series - Printfuture (UK) and Wissler & Partner (Switzerland).

We hope you find the resulting report enlightening. We would be pleased to receive any feedback, so send us an email to [drupa-expert-panel@drupa.de](mailto:drupa-expert-panel@drupa.de).

The drupa team  
March 2016

**drupa Global Trends** March 2016



# Executive Summary

## Positive economic assessments but challenging times for much of the world.

Last year we reported an almost universally positive picture of printers' own economic confidence, even though the more detailed results did not always support that view. This year the picture is subtler with North America confident and Europe recovering steadily, but many of the other regions, whilst still positive overall, express significantly more caution than last year. Those printers serving the Functional and Packaging markets<sup>1</sup> remain very positive for the future, but those serving the Commercial market were cautious and those serving the Publishing market even more so. In other words, for this year's results we need in part to look past the 'global all markets' results and view the results at a more granular regional and market level.

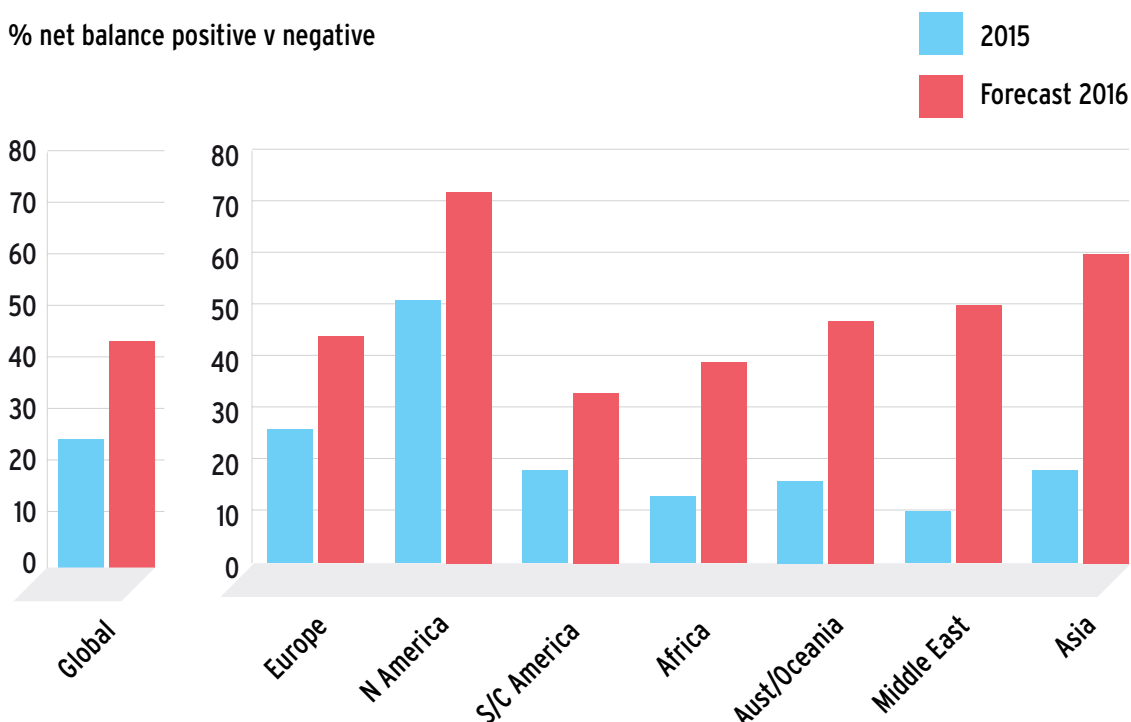
But to start back at the beginning, let us remind readers that we asked two broad questions on how positively participants considered the current economic condition of their company and what they think are their prospects for the coming 12 months<sup>2</sup>. We have described these as the drupa Barometers of economic confidence. 37% of the global panel of printers described their current condition in 2015 as good and 12% said their condition was poor - a positive net balance of 25%. Looking ahead printers were in general more positive with 50% expecting their economic condition to improve in 2016 compared with just 6% expecting it to deteriorate - a positive net balance of 44%.

1. Definitions of markets are given in the brief glossary at the end of the executive summary.

2. Numbers of participants by region and market are given in the Appendix of the full report

## drupa Printer Barometer - economic confidence

% net balance positive v negative



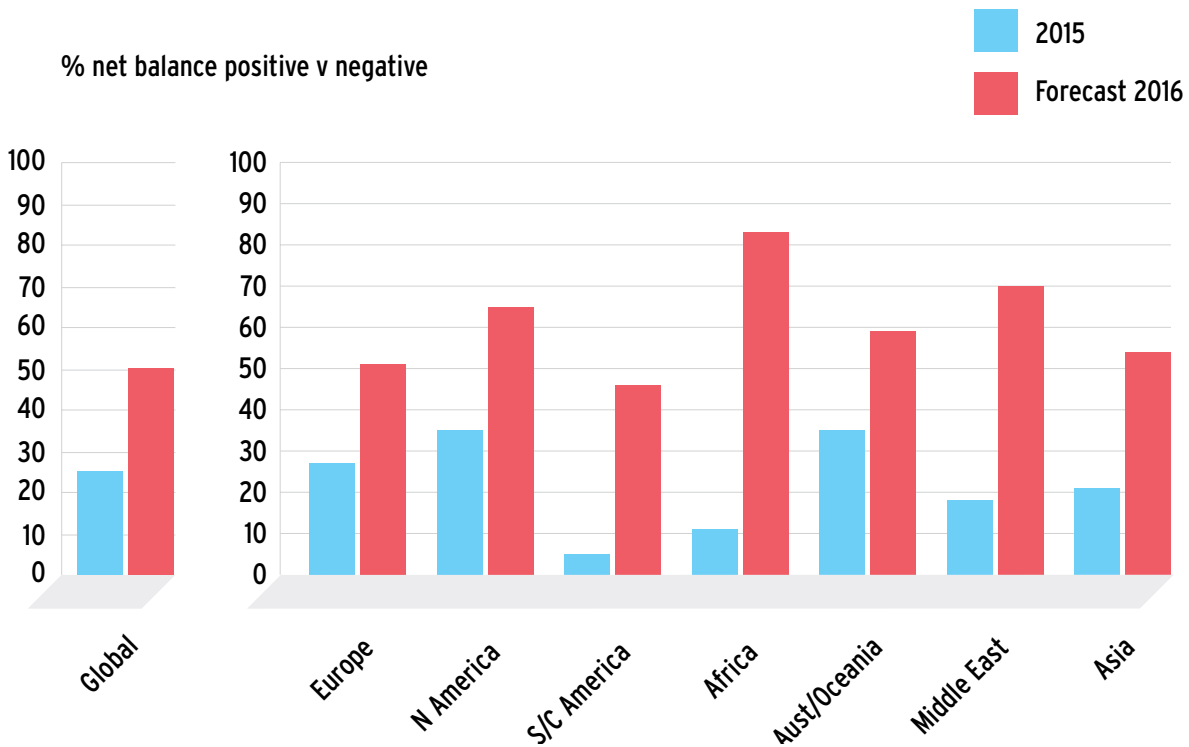
How do you rate the current economic situation of your company? And what are your expectations of your company's economic situation for the next 12 months?

In terms of end markets, those serving Packaging and Functional markets have confidence. Those in the Commercial market have had a tougher 2015 but still look forward to 2016 very positively whilst those in the Publishing market have had a tougher 2015 and are more cautious for 2016.

of 49%. Regional results were patchier with current performance marked down for South/Central America, Africa and the Middle East. Prospects for 2016 were more even and surprisingly positive, given what are clearly difficult conditions in some regions.

Turning to suppliers, the general picture was also optimistic with a positive net balance

### drupa Supplier Barometer 2016 economic confidence



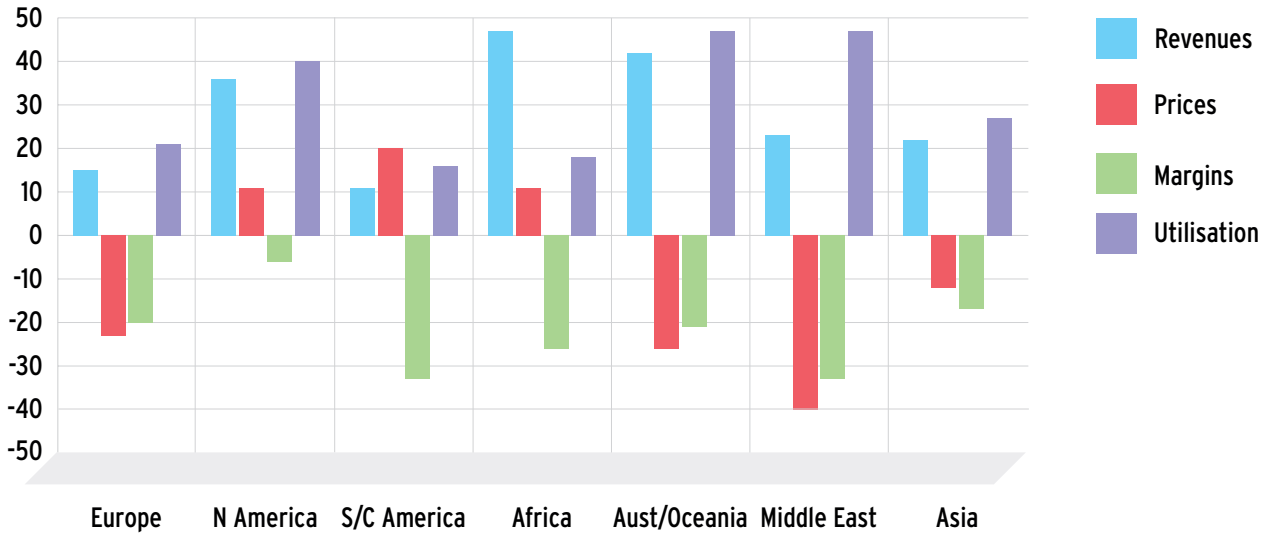
#### How do you rate the current economic situation of your company? and What are your expectations of your company's economic situation for the next 12 months?

It must be said that the broader economic summary that follows this executive summary and the more detailed financial performance measures below should give fresh reasons for caution.

The challenge is most clearly visible in the following chart reporting the key financial measures for printers.

## Printer key performance measures by region

% net balance positive v negative



### How have your company's revenues, prices, margins and utilisation changed over the last 12 months?

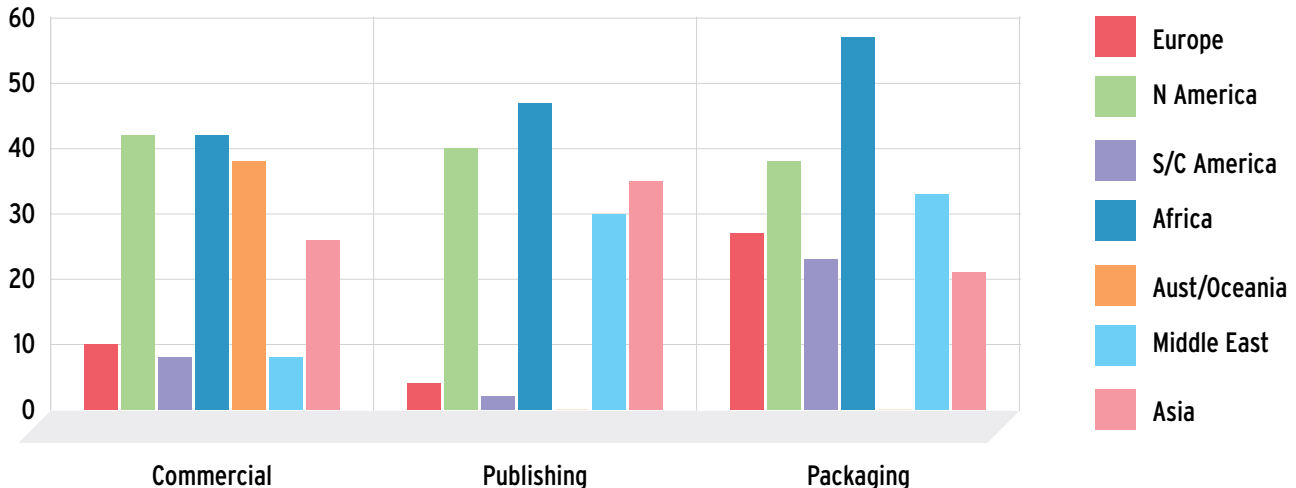
Prices and margins continue to fall in most regions and for most printers the solution in the short term at least is to increase utilisation and therefore revenues. But once again we must examine market variations by region to get a fuller picture e.g. the chart below on regional revenues

shows a very mixed picture even within markets<sup>3</sup>. It is the same very mixed picture for prices for both regions and markets.

3. There were insufficient Functional printer participants for data to be analyzed at a regional level.

## Printer revenues net balances by market by region

% net balance positive v negative



### How have your company's revenues changed over the last 12 months?

Given such tough trading conditions across much of the globe, it is surprising to report that employee numbers have crept up with a global positive net balance of 4% - perhaps a reflection of the ever more challenging work mix and the failure of most printers to grasp the opportunity for automation.

Like printers, the suppliers reported an almost universal decline in prices and margins (N. America being the clear exception). But all regions except S/C America and Australia/Oceania were able to report revenue increases. Overall confidence was down on last year, with better pictures for Europe and N. America offset by greater caution for S/C America, Africa, Australia/Oceania and Asia. In terms of revenue mix, core sales and spares/servicing were strongest and disappointingly training was again weakest.

Given the varied economic conditions across the regions it is not surprising that there were striking variations in financial conditions reported. Two facts emerged globally. First that everyone suffers from poor debtor days and second that printers reported better financial conditions in general than the suppliers.

### **Conventional print declines offset by digital print gains**

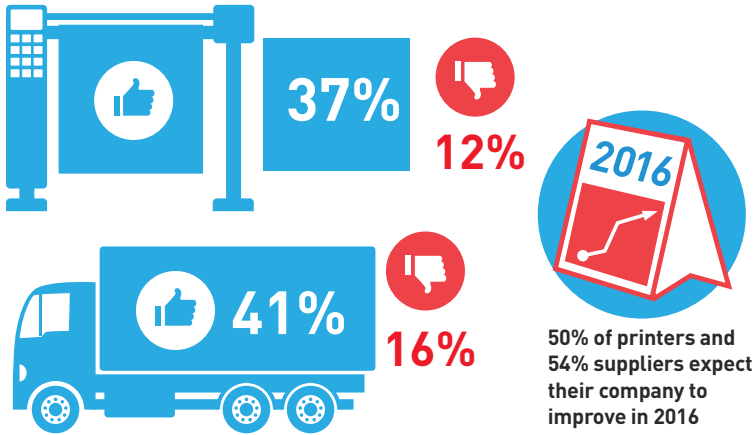
This is a remarkably diverse industry in terms of its core print technology. None of the fourteen differing print technologies scored less than a 10% penetration in at least one of the markets. However it is the digital technologies (particularly cutsheet colour + 28%) that dominate in terms of growth in print volume. There is still growth in sheetfed offset, thanks to publishing (net positive balance of +7%) and packaging (+12%). The growth in flexo and gravure is from packaging (+18% and +3% respectively) and the growth in screen is in functional (+11%).

The trends in the changing production mix of conventional print continue with ever-shorter run lengths and reduced lead times, but some sign of a slow down in the growth of the number of jobs. As for digital print, there is a steady increase in the volume and value of digital print, with the exception of packaging where only 13% reporting that it represents more than 25% of turnover compared to 35% for commercial, 24% for publishing and 59% for functional. This result is in turn driven by the proportion of digital print that is variable, with 59% of functional printers and 35% of commercial printers reporting that more than 25% of their digital turnover was variable by value.

More disappointing to report is that for the second year running there is no significant global increase in either the proportion of Web to Print installations (25% 2015, 26% 2016) or in the volume of business being processed through them. N. America as a region and the Functional print market are the clear exceptions.

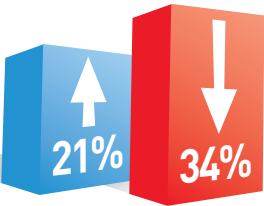
## How are companies doing?

37% printers and 41% suppliers described company current economic condition as good compared with just 12% and 16% as poor.

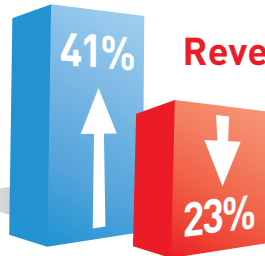


## Key financial performance measures for printers

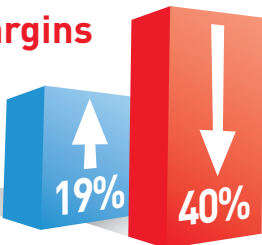
### Prices



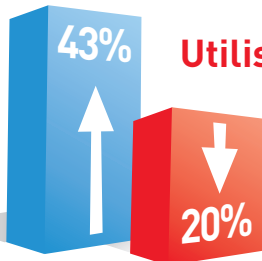
### Revenues



### Margins

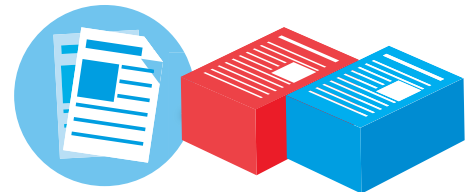


### Utilisation



## Digital print growth

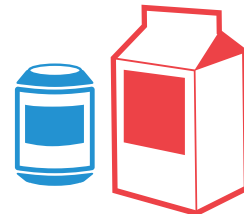
Proportion of digital print that is variable data by value



35% of commercial printers



24% of publishing printers



13% of packaging printers



59% of functional printers

## Capital expenditure plans remain positive

Despite or because of the challenging market conditions both printers and suppliers remain committed to good levels of capital expenditure. In market terms, functional leads with a net balance of 41% reporting increased expenditure in the last 12 months, followed closely by packaging at 36% then commercial at 26% and publishing at 19%. It is a similar pattern with respect to plans for next year. Printing technology is the most common priority followed by Finishing and PrePress/Workflow/MIS (53%, 50% and 38% respectively).

In terms of investment in print technology, Digital cutsheet colour is the most popular choice for three of the markets (45% commercial, 38% publishing, 48% functional) but comes third for packaging at 17% behind Flexo at 30% and Sheetfed offset at 26%. Sheet fed offset is also second choice for commercial printers (23%) and publishing printers (28%). Digital rollfed inkjet comes third for commercial at 16%, publishing at 14% and functional at 24%.

Suppliers have continued to invest in most regions (exceptions being S/C America and Australia/Oceania in 2015) and plan to do so again next year. 42% stated their first priority was to develop new sales channels, followed by 31% who were developing new products or enhancing existing products. Encouragingly there was a positive net balance of 16% reporting an increase in Research and Development expenditure.

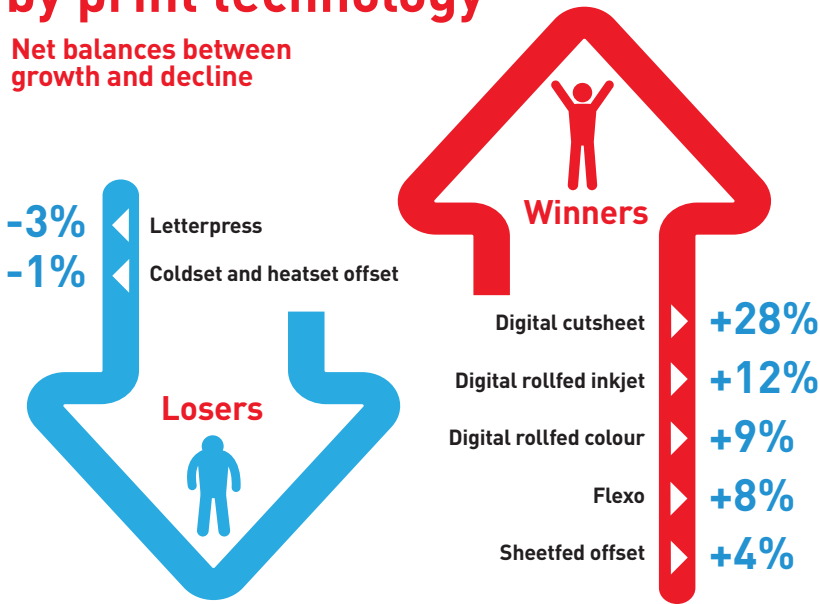
Supplier expenditure on marketing will grow next year - a positive net balance of 33%, with product training and trade shows the most common options chosen, although on-line content and education is also growing fast.

## Strategic issues for printers and suppliers

Both printers and suppliers face rapidly changing markets in generally tough economic conditions. But the key underlying change for at least the commercial and publishing markets is the rapid and largely irreversible adoption of digital communications. All printers listed the key constraints are the lack of sales and the consequential strong competition. As for the lack of sales there was broad agreement that the challenge of finding new customers was the toughest challenge followed by that of finding good sales staff. The third most common constraint was lack of demand for conventional print, but here opinion was sharply divided between Commercial (39%) and Publishing (43%) printers and Packaging (22%) and Functional (24%) printers.

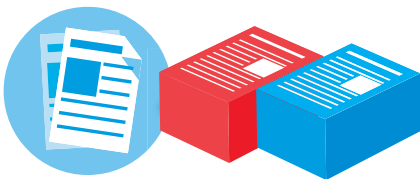
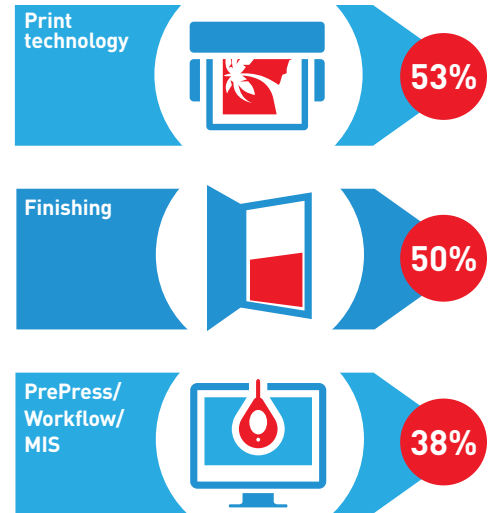
## Changes in volume by print technology

Net balances between growth and decline



## 2016 Printer investment plans

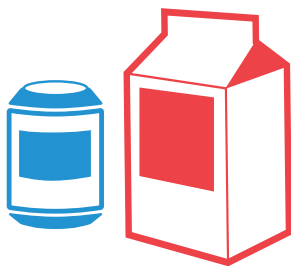
Top 3 investment priorities



### Commercial

Digital cutsheet colour **45%**  
 Sheetfed offset **23%**  
 Digital rollfed inkjet **16%**

## Top 3 print technology investments



### Packaging

Flexo **30%**  
 Sheetfed offset **26%**  
 Digital cutsheet colour **17%**



### Publishing

Digital cutsheet colour **38%**  
 Sheetfed offset **28%**  
 Digital rollfed inkjet **16%**



### Functional

Digital cutsheet colour **48%**  
 Digital rollfed colour **30%**  
 Digital rollfed inkjet **24%**



# Market specific trends for printers

## Commercial printers - slow progress in diversifying

Given the severe decline in core print product in many markets, it is often the 'new' added value print applications that offer fresh opportunities for growth. It is therefore disappointing to report that with the exception of N. America, the proportion of commercial printers that offer these added value services has not significantly increased over the three years surveyed. 38% offer multichannel services globally with N. America 45% and the rest of the world just 22%, probably reflecting the slower growth in use of the Internet in some regions.

## Publishing printers - the growing impact of digital media

There is clear evidence of the growing impact of digital forms of publishing, most evidently in N. America where the proportion of publishing printers reporting more than 10% of titles with online editions has climbed from 16% in 2013 to 50% in 2015. Globally 29% report variable content for more than 5% of titles and 30% report more than 5% of titles have an online edition.

## Packaging printers - growing demand for added value SKUs

In general terms most packaging printers report healthy market conditions, so the pressure to change is less. Nevertheless 28% of packaging printers worldwide are now actively selling digital print (up 5% on last year). Of those, 18% reported strong demand for digital packaging, up 8% in the year. There is fairly widespread adoption of added value packaging, although for most it is still a small minority of SKUs that demand such services as variable content, personalisation, security features and interactive packaging.

## Functional printers - continuing positive development

Again in general terms, this is a buoyant market, but perhaps functional printers are used to a more rapid pace of change. Digital inkjet clearly dominates and it was striking to see how rapidly it had grown in the ceramics application from 20% in 2014 to 87% in 2015 with a commensurate decline in screen and pad. It was a similar transformation in printed electronics from 40% in 2014 to 80% in 2015, but this time with digital electrographic the loser.

## In conclusion

Despite a difficult economic and market background both printers and suppliers are remarkably upbeat about their own companies' economic prospects. To succeed they must have a positive strategy and that means capital investment. Accordingly printers and suppliers report that they will maintain strong investment levels in 2016.

For printers, the priorities are print technology, finishing and workflow. For suppliers, the top priorities are developing new sales channels, enhancing existing products and developing new products. There can be no better opportunity for all keen to see a positive future for both the industry and their own companies than to meet, explore, sell and educate themselves at drupa 2016.

### Commercial printer -

Direct Mail, Business Forms, Security, Wide-format, Trade Finishing for Commercial work

### Publishing printer -

Newspapers, Magazines, Catalogues and Books, Trade Finishing for publications

### Packaging printer -

Labels, Cartons & Carton Board, Flexible Packaging

### Functional printer -

Industrial/Decorative - Printed electronics, 3D, Ceramics, Textiles, Wall coverings

# Economic Outlook

Potential output<sup>4</sup> growth across major advanced and emerging market economies has declined in recent years. In advanced economies, this decline started as far back as the early 2000s. Unlike previous crises, the global financial crisis has been associated not only with a reduction in the level of potential output in advanced and emerging market economies, but also with a persistent reduction in its growth rate. Potential growth in advanced economies is likely to increase slightly from current rates but remain below pre-crisis rates in the medium term.

In emerging market economies, output growth is expected to decline further in the medium term, because of ageing populations, weaker investment, and lower productivity growth as technology gaps between emerging and advanced economies get narrower. Reduced prospects for growth will create new policy challenges such as achieving fiscal sustainability. Increasing potential output will need to be a priority in major advanced and emerging market economies.

As a consequence of these challenges the International Monetary Fund (IMF) has cut its growth forecasts for the global economy in response to a slowdown in China, a looming recession in Russia and the continuing weakness of economic recovery in the Eurozone. It is expected that any benefits from lower oil prices will be outweighed by a number of negative factors including the legacies of the financial crisis and lower potential growth in many countries. Consequently global growth will only edge up slightly from 3.3% in 2014 to 3.5% in 2015. That is down from a 3.8% forecast for 2015 and forecasts for 2016 have been cut from 4% to 3.7%.

This all makes for a mixed economic outlook in 2016 - good news for oil importers, bad news for oil exporters. Good news for commodity importers, bad news for exporters. Good news for countries more linked to the euro and the yen, bad news for those more linked to the dollar.

Britain is expected to lose its place as the fastest-growing major economy to the US in 2015, with UK growth forecast at 2.7% and the US at 3.6%. The US is the only major economy where the IMF has raised growth forecasts for the next two years. It sees a boost from lower oil prices and strong domestic demand helping the US economy to grow 3.6% in 2015, up markedly from a 3.1% forecast made last October.

The IMF predicts Eurozone growth of 1.2% in 2015 and has also cut its 2016 forecast to 1.4% from 1.7%. Forecasts have also been cut for emerging and developing economies based on three factors: lower growth in China; a "much weaker outlook in Russia"; and pressure on oil exporters from lower oil prices. In China, the IMF cut its 2015 forecast to 6.8% from 7.1% and it cut its 2016 forecast to 6.3% from 6.8%. It warns the lower growth is already affecting the rest of Asia. Russia is now viewed as being in outright recession this year, as falling oil prices and sanctions imposed by western governments take their toll.

Divergences across major economies will narrow in 2015-16 as growth plateaus in the United States and strengthens in the Euro Area and Japan. Lower oil prices will support consumer spending and hold inflation at record lows in the short term, but these effects will reduce during 2016.

High-income countries are expected to grow at 2.0% in 2015 (compared with 1.8% in 2014) and 2.3%, on average, in 2016-17. The expected growth pickup reflects the recovery in the Euro Area, continued robust activity in the United States, and increased traction from Japan's monetary, fiscal, and structural policy efforts.

4. Output is 'the quantity of goods or services produced in a given time period, by a firm, industry, or country.' *Alan Deardoff Glossary of International Economics*

Increasing output is a political priority for both advanced and emerging market economies. The reforms needed to achieve this objective vary across countries. In advanced economies, continued demand support is needed to offset the effects of protracted weak demand on investment and capital growth as well as on unemployment. Structural reforms and greater support for research and development is key to increasing supply and innovation. In emerging market economies, higher infrastructure spending is needed to remove critical bottlenecks, and structural reforms must be directed at improving business conditions and product markets.

## Outlook in Major Economies

The weakness in business investment is primarily a symptom of the weak economic environment. With few exceptions, business investment has been as low as might have been expected based on the lack of economic activity.

In advanced economies, private fixed investment has declined by an average of 25% since the global financial crisis compared with pre-crisis forecasts. The slump has been broad based, encompassing both residential (housing) and business investment. Private investment in emerging market and developing economies has also slowed in recent years, following a boom in the early- to mid- 2000s, but more gradually than in advanced economies.

The US economic recovery will be led by private consumption, which will be supported by healthy job growth, higher real wages and disposable income, an expansion in bank lending, a rise in consumer confidence, and a firm housing market. However, some of this domestic strength will continue to be offset by the strong dollar, which will further dampen demand for US exports, and the impending 2016 US elections.

The strength of the European economy in early 2015 was a one-off, as subsequent data have been mediocre. However, private sector lending

is in recovery, after two years of contraction. The European Central Bank will continue to provide a highly accommodative environment for growth: we expect it to extend its quantitative easing programme from September 2016 to mid 2017. The region's migration crisis could deal another blow to the beleaguered EU.

Japan is also struggling for consistent economic growth despite emergency monetary policy settings. The economy contracted in both the second and the third quarter of 2015 and core consumer prices are once again in negative territory. Recent surveys of business confidence contain some encouraging signs, but the prime minister's economic strategy needs a shot in the arm. In time, preparations for the 2020 Olympic Games in the capital, Tokyo, and Japanese membership of the Trans-Pacific Partnership free-trade area should be supportive for investment and exports. But, for the economy as whole, this will be countered by the ongoing fall in the working-age population and the rising old-age dependency ratio.

## Outlook in Emerging Economies

The slowdown in Chinese growth, which started in 2015, will continue through 2016 and beyond. The government has set a new annual growth target of 6.5% for the next five years, which is likely to be difficult to achieve, if market forces are allowed to guide the economy.

After adjusting for China's overstated official growth rates, India has already overtaken China as the growth champion of the region. In India lower oil prices have eased structural problems with high inflation and enabled looser monetary policy. Growth should remain steady, averaging 7.3% a year in 2016-20, but the measures that could see it reach double digits again, land acquisition reforms and a nationwide goods and services tax, will prove hard to legislate.

A decent performance in East-Central Europe was cancelled out by Russia, by far the region's largest economy, resulting in an overall market contraction of 0.8%. Russia has suffered a deep recession, hit by Western economic sanctions over military intervention in Ukraine and slumping oil revenue. There is wide divergence within the region: East-Central Europe is benefiting from improved credit conditions and greater demand from the EU, but the Commonwealth of Independent States economies are suffering from weaker trade as a result of the Russian recession.

The Latin American region grew by just 0.2% in 2015, the slowest growth since 2009. The underperformance is being driven by Brazil, whose GDP is estimated to have shrunk by 3% this year and is forecast to contract by a further 1.5% in 2016. The commodity price decline negatively impacted Latin American economies, and exacerbated the continuing troubles in the biggest economy in the region, Brazil. To help lift economic potential and drive productivity growth, more private sector and foreign investment is needed.

In the Middle East and North Africa there is continued instability caused by social unrest, war and terrorism. The region's problems have increasingly spilled over its borders, reflected in the flood of refugees into the EU and the global threat posed by IS, most recently in the attacks in Paris. Another complicating factor is cheaper oil, which means that oil exporters are confronted by an entirely changed set of economic and policy challenges, while non-oil economies have felt a significant boost. Helped by a buoyant economic performance in Iran, regional GDP growth will accelerate from an estimated 2.1% in 2015 to over 4% a year on average in 2017-20.

Poor growth prospects in the key economies of South Africa, Nigeria and Angola, and a deceleration in some of the previously dynamic economies will continue to depress Sub-Saharan African growth in 2016. Forecast at 3.6%, GDP growth in 2016 will be at the third-slowest rate since 2000. Weak commodities prices and rising interest rates in the US, will continue to expose the structural flaws that plague many African economies.

Data sources from:

*Conference board economic outlook 2016*

*IMF World Economic Outlook, April 2015*

*Global economy in transition - World Bank group 2015*