بنك الإمارات دبي الوطني
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Khatija Haque
Head of MENA Research
+971 4 230 7803
khatijah@emiratesnbd.com

PMIs – a closer look

Over the last three months, the Emirates NBD UAE and Saudi Arabia Purchasing Managers' Indices (PMIs) and the Dubai Economy Tracker Index (DETI) have pointed to accelerating growth in the two biggest GCC economies. For many commentators and residents, this has been difficult to reconcile with lower oil prices, government spending cuts, lack of employment opportunities, and a perceived 'slowdown' in economic activity.

In this note, we shed some light on what exactly the PMIs are telling us about economic activity and explore how well they reflect real GDP growth. As the Dubai Economy Tracker Index is calculated in the same way as the country PMIs, we have included it in this analysis.

What is the PMI and who compiles it?

The Purchasing Managers' Index is a **composite indicator designed to give an accurate overview of operating conditions in the non-oil private sector economy**. 50.0 is the 'neutral' or 'no change' level. A reading above 50.0 signals growth; the higher the reading above 50.0, the faster the rate of expansion. A reading below 50.0 signals contraction; the lower the reading below 50.0, the stronger the contraction.

In the GCC, the PMIs are based on monthly surveys of non-oil private sector companies, and are compiled by IHS Markit, a global provider of financial information services based in the UK. The surveys and methodology are consistent with other PMIs produced by IHS Markit for the rest of the world.

How are the PMI surveys done?

For the **UAE and Saudi Arabia PMIs, around 400 companies are surveyed** each month, with the breakdown across sectors reflecting their sector share of national GDP. For the **Dubai Economy Tracker Index, around 600 firms are surveyed** each month, again representing the structure of Dubai's economy.

The surveys are based on fact, not opinion, except for the question on business sentiment. Questions are of the form, using output as an example, of:

"Is the level of output at your unit (in volume terms) higher, the same or lower than one month ago?"

Firms are asked (in the above format) about their output, new orders, new export orders, employment, backlogs of work, suppliers' delivery times, stocks of purchases (inventory), quantity of purchases (purchasing activity), overall input costs, purchase costs, staff costs, selling prices. Firms are also asked about whether they expect their output in 12 months' time to be higher, lower or the same as this month (business expectations).

Calculating the headline PMI

IHS Markit collates the survey responses into indices for each question, and adjusts for seasonality (except for business expectations which is not seasonally adjusted). The 'headline' Purchasing Managers' Index is calculated with the following components and weightings:

Output – 25%
New Orders – 30%
Employment – 20%
Suppliers' Delivery Times – 15% (index value inverted)
Stocks of Purchases – 10%

The **breakdown of the PMI shows that it is really a 'volume' indicator**, as it is heavily weighted (65%) with the volume of output, new orders and inventory. This should make it a good indicator of real GDP growth, which is largely its purpose.

However, it is important to note that 1) employment only accounts for 20% of the PMI, and 2) changes in purchase prices, selling prices, wages (all nominal variables) are not captured in the PMI.

Why is the PMI relevant?

Official GDP data is only compiled quarterly or annually in the GCC, and with a substantial time lag. For example the UAE's National Bureau of Statistics publishes GDP statistics about six months after the end of the year. The PMI is designed to give a snapshot of how the economy has performed on a monthly basis, and is released just a few days after month-end.

This makes the PMI very useful for both businesses and policy makers, particularly as in the GCC there is a dearth of timely and regular official survey data that is available in other developed and emerging economies, such as retail sales, industrial production or construction activity.

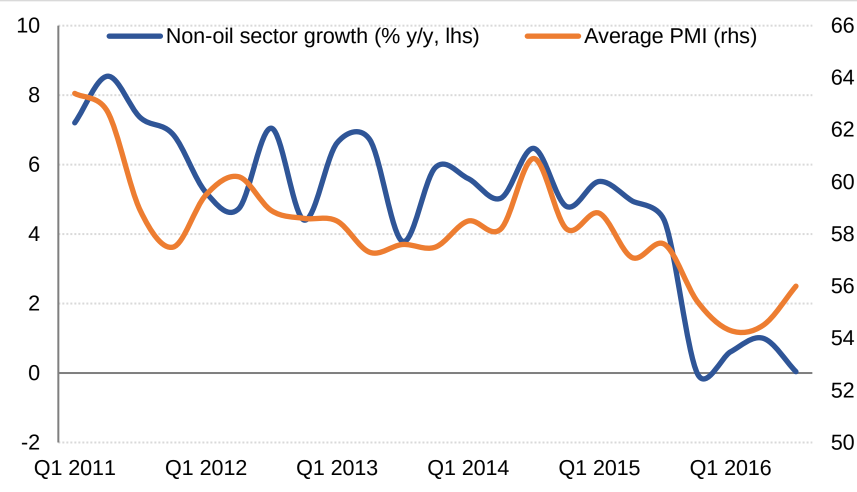
Is the PMI a good proxy for real GDP growth?

PMI surveys are highly regarded for accurately reflecting changes in economic conditions in key global markets, including the US, Eurozone, UK, Japan and Hong Kong.

UAE GDP data is only released on an annual basis, and as the PMI data is only available from August 2009, the time series is not long enough (just 5 data points) to make any kind of sensible comparison.

For Saudi Arabia, we have charted quarterly non-oil GDP growth and the average PMI for the corresponding quarter in Chart 1 below. While the correlation is relatively strong at 75%, the relationship does appear to have weakened somewhat since mid-2015. The size of the oil sector (and oil related manufacturing) in the Saudi economy and the extent of the shock from sharply lower oil prices likely accounts for some of the distortion over the last 12-18 months.

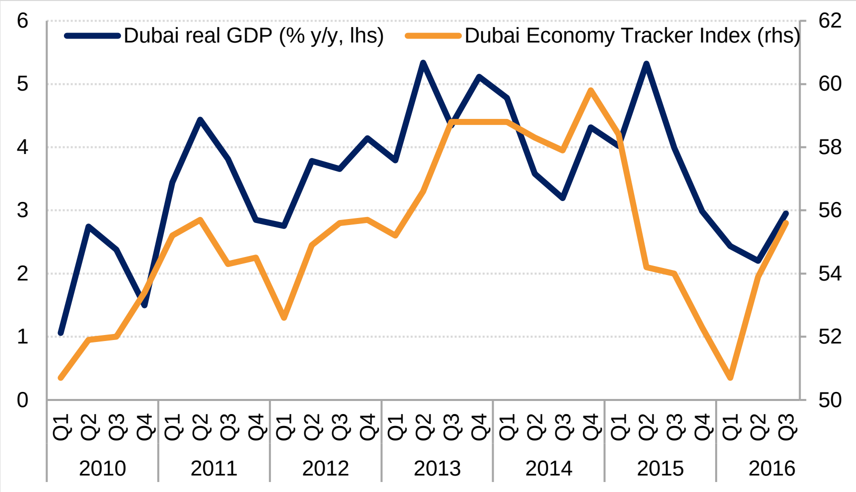
Chart 1: Saudi PMI and non-oil sector growth



Source: IHS Markit, Emirates NBD Research

The Dubai Economy Tracker Index also shows a strong correlation with Dubai's real GDP growth (Chart 2 below). With Dubai having almost no crude oil contribution to GDP, there is less evidence of distortion from sharply lower oil prices on real GDP growth.

Chart 2: DETI and real GDP growth



Source: IHS Markit, Emirates NBD Research

Why can we not 'see' this growth?

The charts above suggest that while they are not perfect by any means, the PMIs are a pretty good indicator of what's happening in regional economies when it comes to real GDP growth. However, for many residents and businesses, there appears to be a disconnect between what is being reported as economic growth and what is being experienced 'on the ground'; ie corporate profitability being squeezed, a lack of employment opportunities, low wage growth and similar issues.

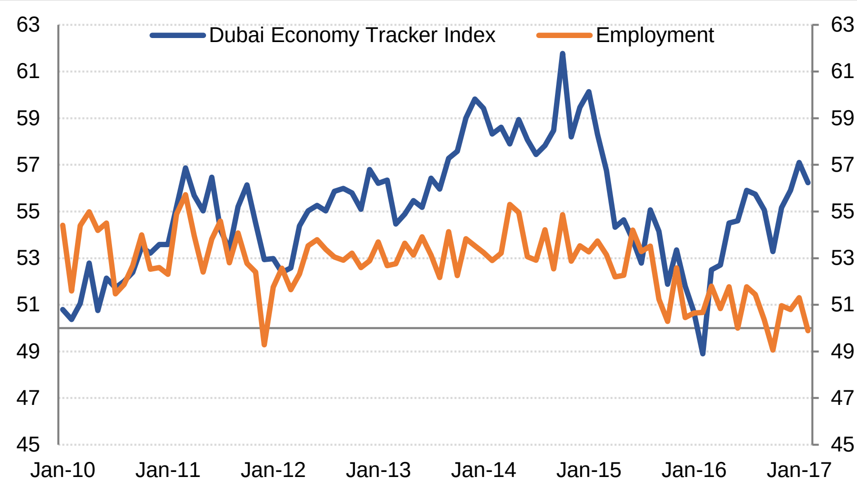
The PMI surveys are reflecting these issues clearly, but as we noted earlier, not every variable is included in the 'headline' PMI, so we need to look beyond the main index reading to get a complete picture of what is happening in regional economies.

Jobless growth?

The UAE PMI and DETI both show a sharp slowdown in job growth since October-2014 (Chart 3), following the decline in oil prices from July that year. In 2016, the employment index of the UAE PMI averaged just 51.2 compared with 52.8 in 2013. The employment component of the DETI averaged 50.8 last year, down from 53.2 in 2013. In October 2016, Dubai's employment index fell below 50.0 signaling a decline in average employment that month.

This suggests that even as output and new orders increased through 2016, firms were reluctant to hire more staff.

Chart 3: Dubai's firms are reluctant to hire

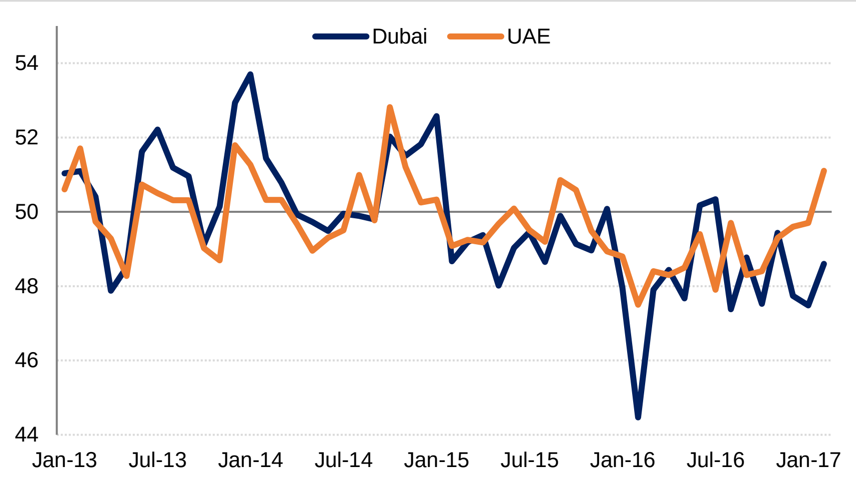


Source: IHS Markit, Emirates NBD Research

Profit margins are being squeezed

Regional PMIs have reflected rising output and new order volumes over the last two years, albeit at a slower rate in 2016. **What is not captured in the headline PMI number is that firms have been cutting their selling prices in order to secure that new work and support demand for their goods and services in a more competitive environment.** This data is captured in the output price index of the survey (Chart 4) but is not a component of the headline PMI.

Chart 4: Output (selling) price index



Source: IHS Markit, Emirates NBD Research

Chart 4 above shows that since the start of 2015, there have only been a couple of months where average selling prices have increased in the UAE and Dubai, relative to the previous month. For most of the time, average selling prices have been unchanged or lower than the previous month. The trend is similar for KSA, although the extent of price discounting in the Kingdom has not been as severe as in the UAE.

To some extent, firms have had to absorb the impact of a stronger USD by lowering their selling prices in the context of a fixed dirham exchange rate.

However, demand was also affected by lower oil prices, weaker sentiment and tighter fiscal policy over the last two years. Firms have had to work harder in order to remain competitive and secure new work.

If we look at the cost of inputs for firms surveyed, these have continued to rise over the last couple of years, further squeezing margins. This has likely increased pressure on businesses in the non-oil private sector to keep costs contained and increase efficiency and productivity to cope with rising new orders and production.

So do the PMIs reflect what's going on in the real economies of the GCC?

The short answer is 'yes', if you are talking about the change in the volume of goods and services produced, which is what real GDP measures. This is what PMIs were largely designed to do. However, the GCC economies are different structurally to most others in that they are heavily reliant on oil, and they have fixed exchange rates.

As a result, the headline PMI does not capture all of the changes in the business environment. In particular, the margin compression experienced by the firms surveyed is not reflected at all by the headline index, but does have an impact on firms' willingness to increase employment and spending in other areas.

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Emirates NBD Research & Treasury Contact List

Emirates NBD Head Office
12thFloor
Baniyas Road, Deira
P.OBox777
Dubai

Aazar Ali Khwaja
Group Treasurer & EVP Global Markets & Treasury
+971 4 609 3000
aazark@emiratesnbd.com

Tim Fox
Head of Research &
Chief Economist
+9714 230 7800
timothyf@emiratesnbd.com

Research

Khatija Haque
Head of MENA Research
+9714 230 7803
khatijah@emiratesnbd.com

Jean Paul Pigat
Senior Economist
+9714 230 7807
jeanp@emiratesnbd.com

Aditya Pugalia
Analyst
+9714 230 7802
adityap@emiratesnbd.com

Anita Yadav
Head of Fixed Income Research
+9714 230 7630
anitay@emiratesnbd.com

Athanasios Tsetsonis
Sector Economist
+9714 230 7629
athanasiost@emiratesnbd.com

Edward Bell
Commodity Analyst
+9714 230 7701
edwardpb@emiratesnbd.com

Mohammed Al-Tajir
Analyst
+9714 609 3005
mohammedtaj@emiratesnbd.com

Shady Shaher Elborno
Head of Macro Strategy
+9714 2012300
shadyb@emiratesnbd.com

Sales & Structuring

Group Head – Treasury Sales
Tariq Chaudhary
+971 4 230 7777
tariqmc@emiratesnbd.com

Saudi Arabia Sales
Numair Attiyah
+966 11 282 5656
numaira@emiratesnbd.com

Singapore Sales
Supriyakumar Sakhalkar
+65 65785 627
supriyakumars@emiratesnbd.com

London Sales
James Symington
+44 (0) 20 7838 2240
jamess@emiratesnbd.com

Egypt
Samy Safwat
+20 22 726 5050
samysafwat@emiratesnbd.com

Group Corporate Affairs

Ibrahim Sowaidan
+9714 609 4113
ibrahims@emiratesnbd.com

Claire Andrea
+9714 609 4143
clairea@emiratesnbd.com

Investor Relations

Patrick Clerkin
+9714 230 7805
patricke@emiratesnbd.com