



## **Media Release**

### **Singaporean Households' Inflation Expectations record 5-year lows fueled by BREXIT uncertainty and global economic headwinds**

Tweet: #Singapore #Inflation #Expectations hits 5 year lows fueled by global headwinds and BREXIT fears @sgsmu <insert [bit.ly](#)>

**Singapore, 18 July 2016 (Monday)** – Singaporeans' One-year-Ahead median inflation expectations moderated to 2.63%, its lowest level since September 2011, according to the research findings of the latest quarterly survey for Singapore Index of Inflation Expectations (SInDEX) by Singapore Management University (SMU).

In its June 2016 meeting, US Federal Reserve Board (FED) kept the interest rates unchanged in a unanimous vote by the Federal Open Market Committee. This can only be partly attributed to the unexpected drop in the number of jobs created in April-May payroll despite stable US growth and low but rising inflation rates. Rising headwinds for global growth could not be missed by the FED and IMF economists among others in at least five aspects. First, the uncertainty surrounding the BREXIT referendum and its potential impact exacerbated the slightly negative global economic outlook despite encouraging growth data from some of the G3 economies (US, Eurozone and Japan). Second, the delay in normalisation of global interest rates possibly foreboding negative rates in some jurisdictions, and the negative to low headline inflation rates compounded by accommodative monetary policy with Quantitative Easing (QE) in major economies, have fueled a lack of confidence in the effectiveness of traditional monetary policies in the G3 among the major economies. Third, the global lack of demand and hence loss of jobs might have contributed to conflicts in and economic migration crisis originating from the Middle East and North Africa. Fourth, the lack of coordination among OPEC countries, and concurrent slump in global oil prices among other commodity prices appeared more due to a long term structural shift rather than short term glut in supply. Finally, the BREXIT vote and risks to Eurozone's financial stability resulted in a flight to safer assets by many investors, despite assurances from central bankers, causing turmoil in global asset and currency markets. Against this backdrop, the unexpected vote of UK residents to leave the EU and the ensuing political uncertainty weakened the long term growth prospects, particularly demand from the EU.

On the domestic front, the persistent slump in accommodation and private road transportation costs (before the current relaxation of financing restrictions) due to higher supply weighed heavily on headline inflation. This downward price pressure was accentuated further by base effects due to disbursement of one-time budgetary concessions despite tight but more accommodative labour market conditions. Although the June SinDEX survey was completed before the BREXIT results were released, the

uncertainty surrounding BREXIT and its impact for small open economies like Singapore was widely discussed. The domestic pass-through costs such as rental and labour costs, coupled with higher prices for service and non-cooked food items among others, did have an upward impact on the Core inflation rate which excludes accommodation and private road transportation costs. This impact was however largely attenuated by benign imported inflation with persistently low global oil prices together with the Singapore dollar that strengthened slightly against the US dollar and trade-weighted basket of currencies. In anticipation, the Monetary Authority of Singapore (MAS) adopted a significant policy by shifting to a neutral stance on appreciation of the Singdollar in April 2016.

The SInDEX, co-developed by Assistant Professor Aurobindo Ghosh of the SMU Lee Kong Chian School of Business, currently funded by Ministry of Education Tier I grant, is derived from an online survey of around 500 randomly selected individuals representing a cross section of Singapore households. The online survey helps researchers understand the behaviour and sentiments of decision makers in Singapore households. The quarterly SInDEX survey has yielded two composite indices, median SInDEX1 and median SInDEX5. Medians are less affected by outliers in survey-based methods, hence median SInDEX is used for the current release.

In the latest and twentieth wave of the SInDEX survey conducted in June 2016, consumers shared their views on expectations of inflation-related variables over the medium term (One-year-Ahead) to long term (Five-year-Ahead).

The results of the June 2016 survey showed that compared to March 2016, the median One-year-Ahead headline inflation (or CPI-All Item inflation) dropped to 2.63% from 2.79% in March 2016, its lowest level since the survey's inception in September 2011. As a comparison benchmark, the *mean* One-year-Ahead headline inflation rate, moderated down to its new low of 2.86% in the June 2016 survey compared to 2.94% in the March 2016 survey, continuing its sub 3% value since December 2015.

Compared to the historical median headline inflation expectations (since September 2011) average of 3.58% and the more recent second quarter average of 2.89%, the current One-year-Ahead median headline inflation is significantly lower. Given the uncertain and weak global growth climate, representative Singaporean households surveyed believe that One-year-ahead expected price changes seem to continue its downward trend.

However, unlike the overall headline inflation, the One-year-Ahead median Singapore core inflation expectations (excluding accommodation and private road transportation related costs) inched up to 3.00% in June 2016 (from 2.91% in March 2016). This increase seems to be anchored or well-grounded in line with the policy guidance from MAS about slow increase in the core inflation expectations over 2016. However, for a subgroup of the population who own their accommodation and use public transport, the One-year-Ahead median Singapore core inflation rate for the subgroup stayed almost the same at 2.9% in the June 2016 survey compared to 2.91% in March 2016, its lowest level since June 2013. This subgroup's expectations of inflation closely tracks the Singapore Core Inflation Expectations, as they are not exposed to private transport or private accommodation expenses.

One-year-Ahead Median Singapore Index of Inflation Expectations (Median SInDEX1), a composite weighted index of One-year-Ahead median inflation expectations, attained its

lowest level of 2.76% in June 2016 from 2.82% recorded in March 2016 survey. This is markedly lower than the historical average value of 3.59% since its inception in September 2011. SInDEx1 is constructed as an alternative and more stable measure of inflation expectations by putting lower weightage on the more volatile and policy-sensitive components like accommodation, private transportation, food and energy. Median SInDEx1 is less adversely affected by outliers, unlike the original mean SInDEx1.

SMU Assistant Professor of Finance Aurobindo Ghosh, who is the Principal Investigator of the SInDEx Project highlighted, "Global economy is facing several challenges despite the unprecedented accommodative monetary policies by the central banks of major economies. US remained the major growth driver, although headwinds in the global economy and not just domestic labour market issues prompted a unanimous decision by the FED to delay normalisation of the US interest rate. It is indeed a tacit acceptance of the interconnectedness of the global economic forces. One major contributory factor seem to be political uncertainty, including the shift to populism rather than pragmatism, as is evidenced from the unexpected BREXIT vote outcome which has caused major upheavals in the markets, especially the European financial institutions. As is evidenced in the survey findings, Singapore being a small open economy, price pressures from both domestic and foreign sources pass through to the medium and long term expectations of prices."

For the longer horizon, the Five-year-Ahead median headline (CPI-All Items) inflation expectations in the June 2016 survey moderated down to 3.48% (from 3.58% in March 2016), hitting its lowest level since the survey's inception in September 2011. The mean Five-year-Ahead mean headline inflation recorded 3.84% in the June 2016 survey, significantly lower than 3.99% recorded in March 2016 survey.

The Five-year-Ahead median Singapore core inflation rate (excluding accommodation and private road transportation related costs) also corrected down to 3.34% in June 2016 from 3.43% recorded in March 2016. The composite Five-year-Ahead median Singapore Index of Inflation Expectations (median SInDEx5) in June 2016 moderated to 3.39% from 3.50% in March 2016, the lowest median SInDEx5 score on record since September 2011. The long term inflation expectations of Singapore Core inflation (without accommodation and private road transportation) seems to be better anchored and significantly lower than the historical average median SInDEx5 of 4.26% since September 2011.

"Over the last twenty quarters since inception in September 2011, the SInDEx survey has reflected Singaporeans' expectations of inflation. It reflected perceptions of individuals who are making purchasing decisions based on available information and experience. Overall, we find that Singaporeans are quite responsive to global changes and do update their beliefs accordingly, although short term fluctuations do not seem to impact long term expectations strongly. In that sense, the inflation expectations are well anchored. However, as with many survey-based inflation measures that are critical components in the toolset of most central banks, the changes in inflation expectations are better captured than the absolute level of inflation. Interestingly, we observed that Singaporeans are well aware of the difference between headline and core inflation rates expectations. In the current June 2016 survey, we found a continuing negative trend in One-year-Ahead headline inflation expectations while the corresponding core inflation

expectations was trending slightly upwards as was forecasted by MAS Recent Economic Developments release in June 2016,” Prof Ghosh added.

### Methodology

Two indices were created, median SInDEx1 and median SInDEx5, to measure the 1-year inflation expectations and the 5-year inflation expectations. The data for the SInDEx survey was collected online from about 500 consumers. The sampling was done using a quota sample over gender, age and residency status to ensure representativeness of the sample. Employees in some sectors like journalism and marketing were excluded as that might have an effect on their responses to questions on consumption behavior and expectations.

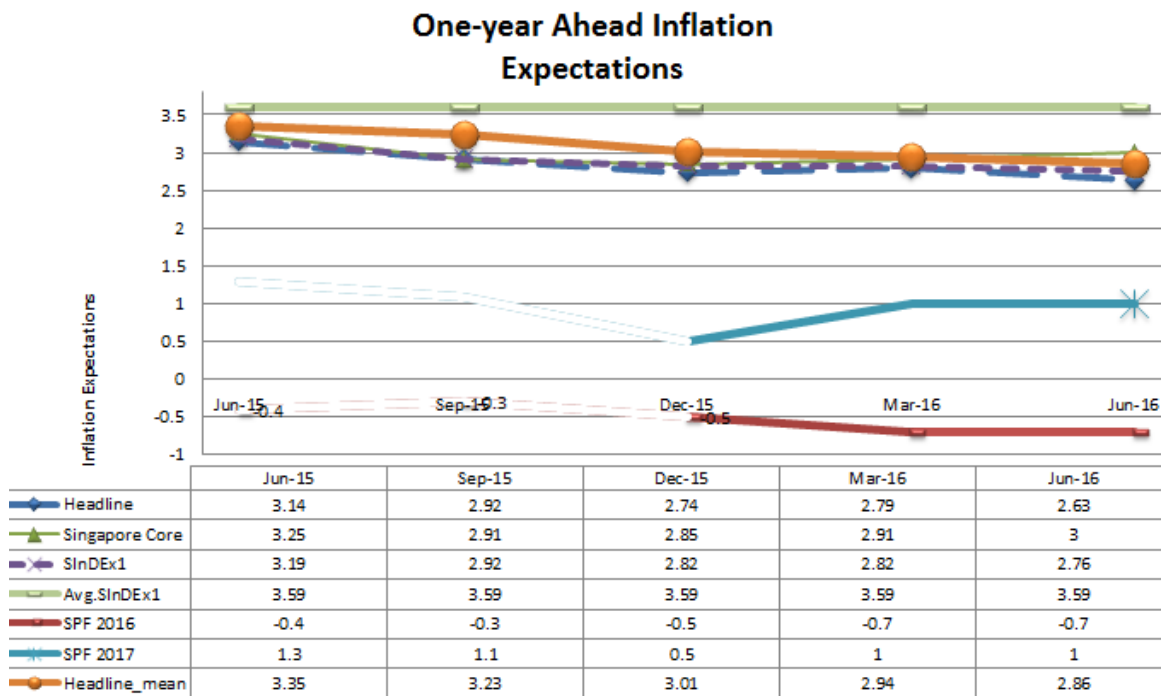


Figure 1: One-year-Ahead-inflation expectations in Singapore

## Five-year Ahead Inflation Expectations

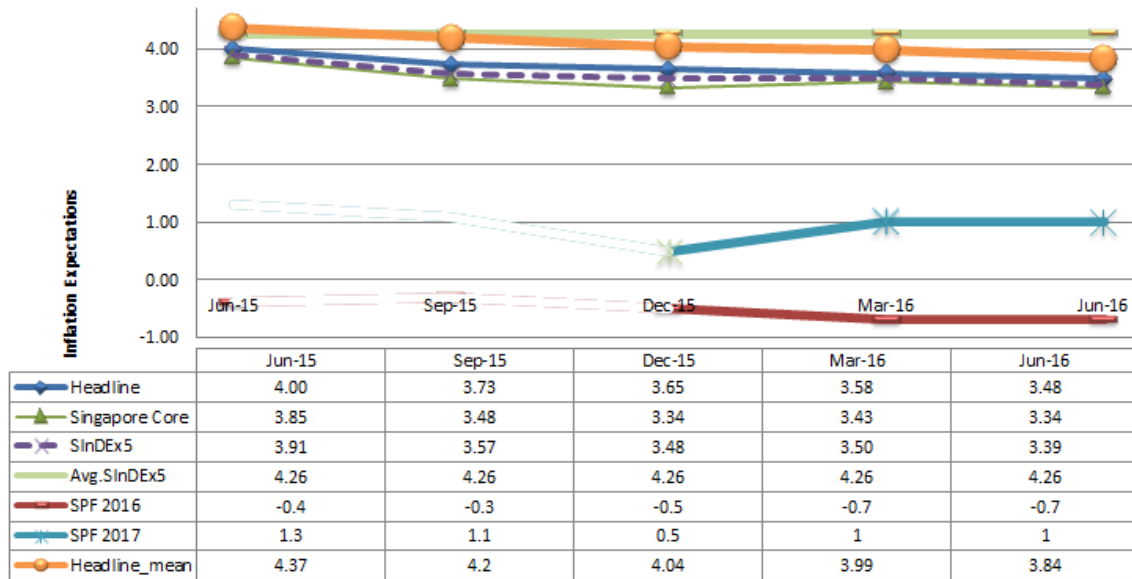


Figure 2: Five-year-Ahead-Inflation Expectations of Singapore

### About Singapore Management University

A premier university in Asia, the Singapore Management University (SMU) is internationally recognised for its world-class research and distinguished teaching. Established in 2000, SMU’s mission is to generate leading-edge research with global impact and produce broad-based, creative and entrepreneurial leaders for the knowledge-based economy. SMU education is known for its highly interactive, collaborative and project-based approach to learning, and for its technologically enabled pedagogy of seminar-style teaching in small class sizes.

Home to around 9,300 undergraduate, postgraduate, executive and professional, full- and part-time students, SMU is comprised of six schools: School of Accountancy, Lee Kong Chian School of Business, School of Economics, School of Information Systems, School of Law, and School of Social Sciences. SMU offers a wide range of bachelors', masters' and PhD degree programmes in the disciplinary areas associated with the six schools, as well as in interdisciplinary combinations of these areas.

SMU has an emphasis on generating rigorous, high-impact, and relevant multi-disciplinary research that addresses Asian issues of global relevance. SMU faculty members collaborate with leading international researchers and universities from USA, Europe, China and India, as well as with partners in the business community and public sector, through its research institutes, centres and labs. SMU’s city campus is a state-of-the-art facility located in the heart of downtown Singapore, fostering strategic linkages with business, government and the wider community. [www.smu.edu.sg](http://www.smu.edu.sg)

**For more information, please contact**

Teo Chang Ching (Mr)

Senior Assistant Director

Corporate Communications

DID: 6828 0451

Email: [ccte@smu.edu.sg](mailto:ccte@smu.edu.sg)