Economics | April 14 2014

CommSec iPad Index: Australia slips down leader-board **Economic trends**

- Australia has slipped down the leader-board of the CommSec iPad index, reflecting higher domestic pricing for Apple's tablet device. Australia had been the fourth cheapest country to buy a 16gb iPad with Retina display when the index was last compiled in September 2013. Now Australia is 13th cheapest of 51 countries to buy the newer iPad Air device.
- In January 2007 CommSec launched its iPod index as a modern way of looking at purchasing power theory. That is, the theory that the same good should be sold for the same price across the globe once taking into account exchange rates.
- At current exchange rates, the US dollar pricing of the iPad in Australia equates with similar pricing of the iPad in the US or China. That suggests - on iPad pricing alone - that the Aussie dollar is around fair value against the greenback. That is, Aussie consumers aren't being tempted to purchase their iPads from the US or China rather than at home.
- Today, the local iPad price stands at \$598. In September 2013 the price of the iPad with Retina display was \$539. The Aussie stands today just below US94c, only down slightly on US94.3 cents back in September 23 2013 when the CommSec iPad index was last compiled. The iPad Air was announced on October 22 2013 and was released on November 1.

What do the index results show?

- In January 2007, CommSec launched its iPod index. It was designed as a new way of looking at purchasing power theory. That is, the theory that the same good should be sold for the same price across the globe once taking into account exchange rates. The Economist magazine has for some time maintained its Big Mac index for the same purpose - that is, tracking the concept of purchasing power parity.
- CommSec still maintains the iPod index with the multimedia device now freely available worldwide. But it is the Apple iPad that now dominates attention together with the iPhone. Unfortunately it is more difficult to track pricing of the iPhone given the complications of telecommunication charges and bundling deals by telcos.
- In Australia the bad news is that Apple lifted local pricing for a number of products. An iPad Air is now \$598, up from \$539 when the iPad with Retina display was priced in September
- The good news is that Australia is still one of the cheapest places in the world to buy the latest tech gear from Apple, just not as cheap as seven months ago.
- Of the 51 locations surveyed, Australia is the 13th cheapest place to purchase an iPad Air, compared with 4th cheapest in

APPLE IPAD AIR 16GB WIFI, \$US

Argentina	\$974.96	Switzerland	\$626.86
Brazil	\$789.08	South Africa	\$622.33
Romania	\$730.60	Czech Republic	\$622.06
Serbia	\$726.80	Slovakia	\$609.64
Croatia	\$721.49	South Korea	\$598.80
Greece	\$706.85	Mexico	\$598.43
Poland	\$697.11	India	\$598.09
Slovenia	\$692.96	Turkey	\$591.61
Norway	\$689.28	Indonesia	\$587.12
Bulgaria	\$688.01	China	\$577.68
Denmark	\$687.96	Philippines	\$574.10
Hungary	\$680.66	Australia	\$561.66
Ireland	\$679.07	Russia	\$561.04
Portugal	\$679.07	Vietnam	\$554.60
Finland	\$679.07	Singapore	\$551.50
France	\$679.07	Chile	\$546.71
Sweden	\$672.87	US-Caliornia	\$542.66
UK	\$667.78	Canada-Ontario	\$534.17
Italy	\$665.19	Taiwan	\$529.38
Belgium	\$665.19	Thailand	\$523.54
Netherlands	\$665.19	UAE	\$517.06
Austria	\$665.19	Hong Kong	\$501.50
Germany	\$665.19	US-ex tax	\$499.00
Spain	\$665.19	Malaysia	\$494.28
NZ	\$650.91	Japan	\$480.36
Luxembourg	\$632.20	Canada-ex tax	\$472.72
Lebanon	\$629.00		

Source: Apple, CommSec. Reuters

Craig James - Chief Economist (Author)

Produced by Commonwealth Research based on information available at the time of publishing. We believe that the information in this report is correct and any opinions, conclusions or

Produced by Commonwealth Research based on information available at the time of publishing. We believe that the information in this report is correct and any opinions, conclusions or recommendations are reasonably held or made as at the time of its compilation, but no warranty is made as to accuracy, reliability or completeness. To the extent permitted by law, neither Commonwealth Bank of Australia ABN 48 123 123 124 nor any of its subsidiaries accept liability to any person for loss or damage arising from the use of this report. The report has been prepared without taking account of the objectives, financial situation or needs of any particular individual. For this reason, any individual should, before acting on the information in this report, consider the appropriateness of the information, having regard to the individual's objectives, financial situation and needs and, if necessary, seek appropriate professional advice. In the case of certain securities Commonwealth Bank of Australia is or may be the only market maker.

This report is approved and distributed in Australia by Commonwealth Securities Limited ABN 60 067 254 399 a wholly owned but not guaranteed subsidiary of Commonwealth Bank of Australia. This report is approved and distributed in the UK by Commonwealth Bank of Australia in Australia with limited liability. Registered in England No. BR250 and regulated in the UK by the

Financial Services Authority (FSA). This report does not purport to be a complete statement or summary. For the purpose of the FSA rules, this report and related services are not intended for private customers and are not available to them.

Commonwealth Bank of Australia and its subsidiaries have effected or may effect transactions for their own account in any investments or related investments referred to in this report.



- September 2013 when assessing pricing on the iPad with Retina display.
- Still it is important to note that sales tax rates provide complications in undertaking comparisons across countries.
 In Australia the GST is included in the price. The sales tax environments aren't as clear on the pricing of iPads in other countries. In Canada and the US there are various prices for the iPad depending on the different state or province sales taxes that apply. We have undertaken comparisons with Ontario in Canada and California in the US.
- The latest CommSec iPad index shows that Latin American, northern and Eastern European countries pay the
 most for their tech devices. In fact Argentinian customers pay the equivalent of \$US974.86 for the iPad Air
 compared with US\$561.66 in Australia.
- On current exchange rates Japan is the cheapest place in the world to buy a new iPad at US\$480.36 (although US\$518.79 with the new GST). Malaysia, Hong Kong and the United Arab Emirates are the other cheapest places to buy an iPad Air when expressed in US dollar terms.
- In Canada the list price for an iPad is the equivalent of US\$472.72 and in the US the list price is US\$499. But those prices are before sales taxes are applied. The Apple store "check out" price for an iPad in Ontario is the equivalent of US\$534.17 with tax and in California the price is US\$542.66, compared with US\$561.66 in Australia.

Purchasing power parity: In theory only

- While the concept of purchasing power parity is good in theory, unfortunately there are complications in practice.
 One of the biggest complications is tax. In Hungary the new iPad seems expensive, but it must be remembered
 that a 25 per cent value added tax (VAT) is applied. The same rate applies in Denmark. In the US, some states
 don't apply a sales tax, but in California with the highest sales tax rate of 8.25 per cent, an iPad Air is actually still
 around US\$20 cheaper than in Australia after the lift in local pricing.
- The other complication with purchasing power parity is freight or shipping cost. Still, if the local price was relatively high and shipping costs weren't overly exorbitant then a buyer may decide to source goods from another country. If enough buyers were to source goods abroad, presumably it would force local retailers to re-assess pricing.

Australia: Pricing adjusted to reflect weaker currency

- Since we began the CommSec iPod index in January 2007, Australia has always been one of the cheapest places in the globe to buy an iPod nano media player. In fact Australia was the cheapest place to buy the popular media player in both October 2008 and December 2009.
- Changes in Australia's relative position reflect the appreciation of the Australian dollar as well as local pricing by Apple. The important point is that local retailers and suppliers face the same dilemma as Apple - when currencies change, how quickly should local pricing change? And if you do change selling prices, do you fully adjust for the currency impact? There is a range of influences that play a part in the decision, including a judgement about whether the currency change is likely to be permanent or temporary.
- On-line shopping sites and the power of travel are putting pressure on Australia retailers to remain competitive. If local pricing isn't responsive to exchange rate changes then Aussie shoppers will increasingly look overseas to purchase imported items.
- The need to keep track of local pricing is highlighted by the CommSec iPad and CommSec iPod indexes. It would appear logical that Australia's position on the indexes was reasonably consistent. If local pricing hadn't changed then the US dollar price of an iPad Air in Australia would be US\$506.25, leaving Australia as the fourth cheapest in the world to buy an iPad. In September 2012 with the Aussie dollar near US\$1.05, Australia was the 15th cheapest place to buy an iPad with Retina display. Now it is the 13th cheapest. The drop in the currency from September 2012 to September 2013 was a movement from around US\$1.05 to US94c a fall of around 10-11 per cent. The lift in the iPad price from \$539 to \$598 was an increase of 11 per cent.

Big Mac index, and exchange rates

- CommSec has maintained its iPod index since January 2007 as a way at looking at issues such as the impact of currency changes on consumer spending, globalisation and retailer margins. With relative importance switching from iPods to iPads, CommSec also started compiling iPad indexes.
- The CommSec iPod and iPad indexes are designed as modern day variants of the long-running Big Mac index compiled by *The Economist* magazine. Both the iPad and Big Mac indexes work on the theory of 'same good, same price'. That is, the same good should trade at broadly the same price across the globe if exchange rates are adjusting properly.
- The Economist uses its Big Mac index to track the economic theory of purchasing power parity (PPP). That is, the
 theory that the same good should trade for the same price across the globe once adjusted for exchange rates.
 The index works by dividing the local price of a Big Mac by the US price of a Big Mac. This gives the PPP
 exchange rate. If the actual exchange rate is above the PPP rate, the theory says that the currency is overvalued, and may need to fall to bring the goods in both countries in line.



- The problem is that Big Macs aren't exchanged across country borders. But the assumption is that Big Macs are a
 proxy for other goods that certainly may be traded. The other problem is that the Big Mac index assumes a US
 base, and thus assumes that US goods are appropriately priced.
- The latest Big Mac index (January 2014) concluded that a range of currencies were over-valued against the greenback including those from Switzerland, Norway, Brazil and Sweden. The Euro was considered slightly over-valued. The UK pound, Aussie dollar and NZ dollar were considered fairly valued but a raft of other currencies were under-valued including those from Hong Kong, Malaysia, Japan and UAE some of the cheapest places to buy an iPad in US dollar terms according to our CommSec iPad index.

CommSec iPad and CommSec iPod indexes and exchange rates

- The CommSec iPad and CommSec iPod indexes also assume that the same good should sell for the same price across the globe once exchange rates are taken into account. But the difference with the Big Mac index is that Apple tech devices can indeed be exchanged across the globe. If they are particularly cheap in one country it could cause tourists to buy their tech devices when on holiday, prompt people to them on-line in other countries, or prompt some companies to take advantage of arbitrage opportunities.
- But iPods and iPads are manufactured in one place (China mainland China as well as Taiwan) and sold across the globe. So it won't just be the cost of the good that could result in price differences across the globe but also local taxes, freight and different mark-ups.
- But if you assume that the Aussie price for an iPad Air should be the same price as that paid by a resident in California, then the exchange rate would need to be at US91 cents rather than just under US94 cents.
- Alternatively, if you assume that the Aussie price for an iPad with Retina display should be the same as China
 where the goods are manufactured, the appropriate level of the Aussie dollar would be US96.5 cents. But this
 raises the question about whether the Aussie is too cheap or that the Chinese yuan is too dear.

What are the implications for interest rates and investors?

- The CommSec iPad index and CommSec iPod indexes are useful in highlighting the globalisation of retail shopping and the powerful role occupied by currency changes. Australia is now the 13th cheapest place to buy an iPad Air (16gb, wi-fi) device. In September 2013, Australia was the 4th cheapest place to buy an iPad but that was before changes to local iPad pricing to reflect a weaker Aussie dollar. In September 2012, Australia was the 15th cheapest.
- In 2012 we suggested that the Aussie dollar was around 5 per cent overvalued against the US dollar. At the same time *The Economist* magazine, via its Big Mac index found the Aussie dollar to be 8 per cent over-valued against the greenback. Today, the Aussie dollar is around 10 per cent cheaper against the greenback.
- In September 2013, when the Aussie was around US94c, both the CommSec iPad and *The Economist* Big Mac indexes suggested that the Aussie dollar was about right relatively fairly valued.
- The Aussie dollar had fallen to just above US87 cents in late January 2014 but it has since rebounded to near US94c again.
- So is the Aussie dollar fairly valued again against the greenback? Certainly at current exchange rates the US dollar pricing of the iPad in Australia equates with similar pricing of the iPad in the US or China. That suggests on iPad pricing alone that the Aussie dollar is around fair value against the greenback. But as we've noted above, The Economist Big Mac index and CommSec iPad index are only two ways of looking at the issue of "fair value".
- The changes in the CommSec iPad index over the past seven months highlight the need for Australian retailers to constantly keep track of local and overseas pricing, new foreign suppliers offering low shipping costs and exchange rate movements.
- Certainly at current pricing there is value in Aussie travellers purchasing their iPads on holidays, especially from Hong Kong, Malaysia, Japan or Singapore.

Craig James, Chief Economist, CommSec

Savanth Sebastian, Economist, CommSec