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The CommSec iPad Index: Aussie dollar too dear? **Economic trends**

- 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.
- Over time we have modified the index to keep pace with changes in products such as the iPod touch, iPad2 and the "new iPad". This update looks at the pricing of the iPod nano, new iPad and iPod touch in 46 countries.
- In April 2011 Australia was determined to be the fifth cheapest place to buy the new iPad 2 device (16gb, Wi-Fi only model) of the 26 countries where it was available at the time. How times have changed. Australia is currently assessed as the 15th cheapest place of 46 countries to buy a new iPad; 10th cheapest to buy an iPod touch; and 14th cheapest place to buy an iPod nano.
- On current exchange rates and pricing, Hong Kong and Malaysia are the cheapest places for Aussie buyers to purchase key Apple tech items. Over the last three weeks, the new iPad has become US\$22 or 4 per cent dearer in Australia on exchange rate changes. If the Aussie dollar rises further and local pricing doesn't change, it will be increasingly more attractive to buy imported items like the new iPad from
- If current pricing is regarded as correct the CommSec iPad and CommSec iPod indexes suggest that the Aussie dollar is around 5 per cent over-valued against the greenback. The Economist Big Mac index found the Aussie dollar to be 8 per cent over-valued.
- While Australia is lagging on the Olympic medal table, there is some solace for Aussies in that key Apple tech gadgets are far cheaper in Australia than in the UK or major European nations.

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. But we are able to track the iPod Touch that can similarly use "apps" but without the ability to make phone calls.
- The good news for Aussie consumers is that Australia is still one of the cheapest places in the world to buy the latest tech gear from Apple. The bad news is that it is by no means the cheapest despite the strength of the Aussie dollar.
- Currently we assess of the 46 locations surveyed that Australia is the 15th cheapest place to purchase a "new iPad" (16gb wi-fi); the 10th cheapest place to buy an iPod touch (8gb); and 14th cheapest place to buy an iPod nano (8gb). Sales tax rates provide complications in undertaking comparisons across countries, especially Canada and the US. But we have undertaken comparisons with Ontario in Canada and California in the US.

Craig James - Chief Economist (Author) (02) 9118 1806 (work); 0419 695 082 (mobile), (02) 9525 2739 (home) | craig.james@cba.com.au; Twitter: @CommSec

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- The latest CommSec iPad and iPod indexes show that Latin American and eastern European countries pay the most for their tech devices. In fact Brazilian customers pay the equivalent of \$US763.51 for the new iPad compared with US\$569.95 in Australia.
- On current exchange rates Malaysia is the cheapest place in the world to buy a new iPad at US\$479.76, \$90.19 (A\$85.25) or 16 per cent cheaper than in Australia. But Hong Kong is arguably the most attractive place for Aussie tourists or on-line shoppers for key Apple tech devices. A new iPad is the equivalent of A\$475 in Hong Kong, around \$64 or 12 per cent cheaper than in Australia.
- The latest CommSec iPad and iPod indexes throw up interesting results where New Zealand pays US\$27 more than Australia for the new iPad and just over US\$5 more an iPod touch but it is a slightly cheaper destination (US\$2.69) to buy an iPod nano than 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.

• 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.

cent, a new iPad would be US\$29.78 or around 5 per cent cheaper than in Australia.

In the US, some states don't apply a sales tax, but even in California with the highest sales tax rate of 8.25 per

APPLE NEW IPAD 16GB WIFI, \$US

Brazil	\$763.51	Germany	\$593.56		
Argentina	\$710.19	Slovenia	\$593.56		
Turkey	\$691.26	Finland	\$593.56		
Chile	\$686.62	Canada (Ontario)	\$585.94		
Hungary	\$669.18	China	\$578.77		
Sweden	\$655.81	Mexico	\$578.20		
South Africa	\$650.58	Philippines	\$573.92		
Russia	\$640.61	Australia	\$569.95		
Poland	\$639.47	Luxembourg	\$564.13		
Norway	\$634.04	India	\$547.09		
Greece	\$630.73	Vietnam	\$546.98		
UK	\$624.32	South Korea	\$546.50		
Denmark	\$616.05	Japan	\$545.64		
France	\$605.95	Switzerland	\$545.02		
Czech Republic	\$604.17	UAE	\$544.32		
NZ	\$597.35	US (California)	\$540.17		
Austria	\$593.56	Singapore	\$529.88		
Ireland	\$593.56	Thailand	\$522.98		
Portugal	\$593.56	Canada (ex tax)	\$518.53		
Spain	\$593.56	Indonesia	\$517.86		
Italy	\$593.56	Taiwan	\$517.27		
Netherlands	\$593.56	Hong Kong	\$501.39		
Belgium	\$593.56	US (ex tax)	\$499.00		
Slovakia	\$593.56	Malaysia	\$479.76		
Source: Apple, CommSec, Reuters					

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Australia no longer cheap

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.

2009

- The change in Australia's relative position reflects 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. But some odd quirks appear, with the new iPad far dearer in NZ than Australia but the iPod nano is slightly cheaper in NZ than Australia. And in Indonesia the new iPad is A\$80

APPLE IPOD TOUCH 8GB, \$US

Brazil	\$354.40	Slovakia	\$246.59
Argentina	\$337.55	South Africa	\$245.43
Vietnam	\$311.85	Mexico	\$243.41
Turkey	\$309.22	India	\$242.15
Chile	\$291.28	South Korea	\$237.11
Hungary	\$285.49	NZ	\$236.81
Greece	\$283.77	Czech Republic	\$235.47
Sweden	\$282.77	China	\$235.09
Russia	\$281.07	Luxembourg	\$234.36
Philippines	\$274.88	Netherlands	\$234.20
Poland	\$273.88	Germany	\$234.20
UK	\$264.43	Singapore	\$231.92
Indonesia	\$264.16	Australia	\$231.57
Slovenia	\$263.94	Spain	\$229.24
Finland	\$258.98	Canada (Ontario)	\$224.67
Ireland	\$251.55	Malaysia	\$223.72
Taiwan	\$249.96	UAE	\$217.56
Denmark	\$249.65	US (California)	\$215.42
Norway	\$249.27	Switzerland	\$215.33
Italy	\$246.59	Japan	\$214.18
France	\$246.59	Thailand	\$206.02
Belgium	\$246.59	Hong Kong	\$204.78
Portugal	\$246.59	US (ex tax)	\$199.00
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Austria	\$246.59	Canada (ex tax)	\$198.82

Source: Apple, CommSec, Reuters



cheaper than in Australia but the iPod nano is A\$20 dearer than in Australia.

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.
- The CommSec iPod index was also designed as a modern day variant of the long-running Big Mac index compiled by *The Economist* magazine. Both 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 over-valued, 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 concluded that a range of currencies are over-valued against the greenback including those from Switzerland, Norway, Brazil and Australia (8 per cent over-valued). The Euro was considered fair value but a raft of other currencies were over-valued including those from the UK, Indonesia, New Zealand, China and Hong Kong.

APPLE IPOD NANO 8GB, \$US

Brazil	\$285.39	Denmark	\$166.38
Turkey	\$237.58	Luxembourg	\$163.71
Argentina	\$206.80	Czech Republic	\$161.73
Hungary	\$202.95	Netherlands	\$159.85
Greece	\$197.03	Germany	\$159.85
Vietnam	\$196.69	Mexico	\$159.71
Sweden	\$193.24	India	\$159.64
Slovenia	\$189.59	South Korea	\$157.78
Russia	\$187.28	Australia	\$157.56
Chile	\$187.25	China	\$156.62
Finland	\$184.63	Spain	\$154.89
South Africa	\$184.04	NZ	\$154.87
Poland	\$182.49	Taiwan	\$153.18
UK	\$179.94	UAE	\$149.49
Indonesia	\$179.60	Thailand	\$148.97
Philippines	\$179.19	Canada (Ontario)	\$145.64
Ireland	\$174.72	Singapore	\$144.95
Austria	\$172.24	Malaysia	\$143.70
France	\$172.24	Switzerland	\$143.21
Belgium	\$172.24	US (California)	\$139.64
ltaly	\$172.24	Japan	\$137.68
Slovakia	\$172.24	US (ex tax)	\$129.00
Portugal	\$172.24	Canada (ex tax)	\$128.88
Norway	\$167.13	Hong Kong	\$128.70

Source: Apple, CommSec, Reuters

CommSec iPad and CommSec iPod indexes and exchange rates

- The CommSec iPad and CommSec iPod indexes also assumes 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 iPods when on holiday, prompt people to buy iPods on-line in other countries, or prompt some companies to take advantage of arbitrage opportunities.
- But iPods 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.
- As noted, when the US is used as a base for assessing PPP exchange rates, the CommSec iPod index also finds that the Swiss franc, Norwegian kroner, Brazilian real and Australian dollar were over-valued against the US dollar.
- On the basis of the CommSec iPad and CommSec iPod indexes we find the Aussie dollar to be around 5 per cent over-valued against the US dollar.
- The Hong Kong dollar is pegged to the US dollar, but on pricing relativities, the Hong Kong dollar would be regarded as under-valued against the US dollar together with the Indonesian rupiah, Chinese yuan, Malaysian ringgit, Thai baht and Singapore dollar.
- But is the US still one of the cheapest places in the world to buy an iPad or iPod because the US dollar is actually too cheap? Certainly the US dollar is weak, courtesy of near zero interest rates and an economy emerging from recession.

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 the 15th cheapest place to buy a new iPad (16gb, wi-fi) device, and while this is lower than in many countries including Europe, buyers are still better off



purchasing the highly valued tech device overseas. Certainly travellers to many Asia destinations such as Singapore, Indonesia, Hong Kong and Malaysia can enjoy substantial savings by purchasing a new iPad while they are away.

- Australian retailers are already under substantial pressure from consumer conservatism and a strong Aussie dollar and the pressures aren't likely to ease any time soon. Retailers must constantly keep track of local and overseas pricing, new foreign suppliers offering low shipping costs and exchange rate movements.
- While Australia is currently still in the lower half of the global ranking of places to buy key Apple devices, as CommSec has demonstrated with the iPad and iPod indexes, if pricing is not responsive to currency changes then opportunities to purchase abroad quickly open up.
- In part, the relative attractiveness of Australians to purchase key imported goods abroad may be due to an overvalued exchange rate. The Economist magazine found the Aussie dollar to be 8 per cent over-valued against the greenback. The CommSec iPad index and CommSec iPod indexes find the Aussie dollar over-valued by around 5 per cent. If the Aussie dollar was to ease back to parity against the greenback, many businesses in Australia would celebrate as would foreign investors interested in Australian stocks.

Craig James, Chief Economist, CommSec

Work: (02) 9118 1806; Home: (02) 9525 2739; Mobile: 0419 695 082; Twitter: @CommSec