HSI

Household Spending Intentions

9 November 2021



Household Spending Intentions - Oct 2021

Welcome to the first edition of our new CommBank Household Spending Intentions (HSI) Index. With the launch of the HSI in July 2019 we combined CBA internally generated data with Google search terms to provide a view for seven spending categories on not only what Australians were spending money on, but what did they intend to spend money on.

For the launch of the updated CommBank HSI Index we have added five new spending categories: Insurance costs, Transport, Utilities, Communications & Digital and Household Services – taking the HSI coverage to almost all consumer spending. The other big enhancement is the introduction of the HSI Index. Each month we will publish the HSI Index, using the weighted change in the 12 individual spending categories. Significantly, changes in the HSI Index are well correlated with the annual change in National Accounts household final consumption data and we think this series will, in time, become an important data set for the Australian economy, financial markets and policy makers. Please refer to the HSI Hub at <u>www.commbank.com.au/HSI</u> for further details. For October 2021, the 'highlights' of the HSI Index include:

- The CommBank HSI Index rose a strong 6.6% in October to be at 108.0, led by gains in Travel, Transport and Household services.
- The Home buying spending intentions index was -1.4% lower on the month, but still remains well up on an annual rate at +12.4%.
- The Retail spending intentions index rose at a solid 9.1% in October, reflecting the reopening of large parts of the economy.
- The Motor vehicle spending index was 1.0% lower in October, reflecting supply-side constraints. The annual rate is up 31.9%.
- The Entertainment spending intentions index rose a strong 14.7% in October, but remains down on an annual basis at -7.2%.
- The Travel spending intentions index jumped a substantial 52.7% in October and is now also above year-ago levels at +13.5%.
- The Education spending intentions index was unchanged on the month and is up only marginally on an annual rate at +2.1%.
- The Health & fitness spending intentions index was up just 1% in Oct.
- The Insurance spending intentions index was down -0.7% in October and is up by a small 1.8% on an annual basis.
- The Transport spending intentions index jumped 20.7% higher in October as the economy reopened, but remains below year-ago levels.
- The Utilities spending intentions index was -0.7% lower on the month and is only marginally higher on an annual basis at +0.7%.
- The Communications & digital spending intentions index was little changed in October and is only a touch higher on an annual rate.
- The Household services spending intentions index rose strongly in October at +24.1% and is now back above levels of a year ago.

CommBank HSI In	<mark>idex</mark>	
October 2021		
108.0		
+6.6% / mth	Ť	
+4.4% / yr	Ť	
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	ne buying.	

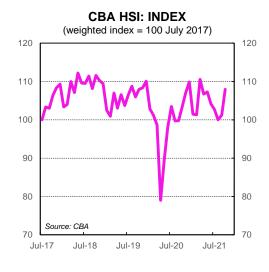
Spending Category	Mthly change %	Yr change %	
Home Buying	-1.4% •	+12.4%	
Retail	+9.1%	+4.1%	
Motor Vehicle	-1.0% •	+31.9%	
Entertainment	+14.7%	-7.2%	
Travel	+52.7%	+13.5% 1	
Education	0.0%	+2.1%	
Health & Fitness	+1.0%	+9.9% 1	
Insurance Costs	-0.7% •	+1.8%	
Transport	+20.7%	-1.5% ↓	
Utilities	-0.7% ↓	+0.7%	
Communications & Digital Streaming	-0.3%	+0.4%	
Household Services	+24.1%	+5.5%	

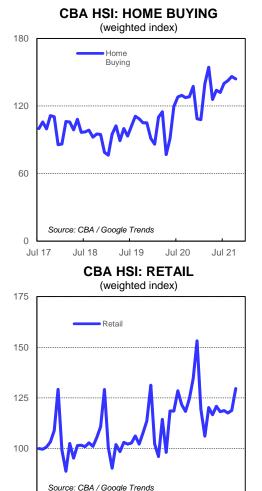
Stephen Halmarick Chief Economist - Head of Global Economic & Markets Research T. 61293033030 E. stephen.halmarick@cba.com.au Belinda Allen Senior Economist T. 61293033110 E. ballen@cba.com.au Stephen Wu Economist T. 61299160986 E. stephen.wu@cba.com.au

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HSI Dashboard





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Jul 17

Jul 18

Jul 19

Jul 20

Jul 21

HSI Index

- The CommBank HSI Index was 108.0 in October 2021, a strong rise of 6.6%/mth to be up 4.4%/yr. The strength in October reflected the reopening of large parts of the economy and a willingness of Australians to get back out and about to spend and travel.
- At 108.0 the CommBank HSI Index is almost back to the level of March 2021 the peak pre-Delta, and well up from the 'lockdown' low in August 2021.
- The jump in the CommBank HSI Index in October was driven by a very strong rise in the Travel index (+52.7%/mth), a solid rise in the Transport index (+20.7%/mth) and gains in the Household services index (+24.1%/mth). Gains were also seen in the Entertainment index (+14.7%) and the Retail index (+9.1%/mth).
- This strength was only marginally offset by small declines in the Home buying index (-1.4%/mth), and the Motor vehicles index (-1.0%/mth).

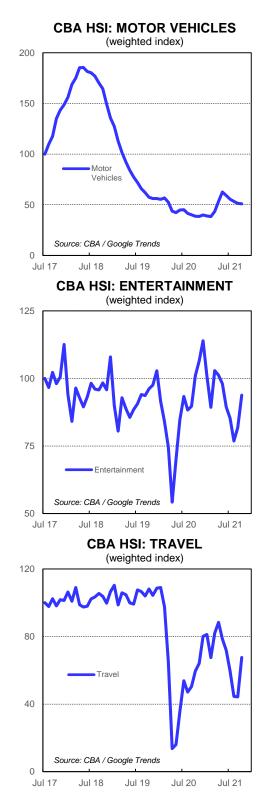
Home buying intentions index

- The Home buying spending intentions index was -1.4%/mth lower in October 2021, but still remains well up on an annual rate at +12.4%.
- Home loan applications were a little higher in October, but this positive momentum was partly offset by a decline in Google searches for property inspections and appraisals.
- APRA has recently taken a step to slow the pace of home lending by raising the serviceability interest rate buffer by 50bp to 3.0%. This was implemented on 1 November 2021. However, we doubt this will have a significant impact on the pace of home lending, as the overwhelming majority of home loan approvals are not at the borrowers' maximum capacity.

Retail spending intentions index

- Retail spending intentions continued to improve in October 2021, up 9.1%/mth. Retail spending intentions are also up relative to October 2020, but by a more modest 4.1%.
- Relative to October 2020, October 2021 saw strong rises in spending intentions for: department stores, electronic stores, hardware, family clothing, pet shops, household appliances and florists.
- In a sign that many people may be preparing for end-of-year events, there was also a noticeable increase in spending intentions for clothing rentals and tailors/alteration studios.
- In the opposite direction and perhaps in a sign that people are now intending to spend less time at home, there was a decline relative to October 2020 in spending intentions for: window coverings, upholstery, glass, paint, wallpaper, artist supplies and sewing supplies.





Motor vehicle spending intentions index

- The Motor vehicle spending intentions index was down -1.0% in October. This reflected a decline in actual spending on new and used cars and little change in Google searches. On an annual basis, motor vehicle spending intentions are still up a solid 31.9%.
- In our view, part of the decline in actual spending on new and used cars in October 2021, as well as a very modest increase in personal loan applications for cars, is likely to be associated with global supply-side constrains with the supply of new cars into Australia significantly impacted.
- With NSW and Victoria now re-opening, it will be important to see the supply of new vehicles improve, although there may now be a shift back towards public transport.

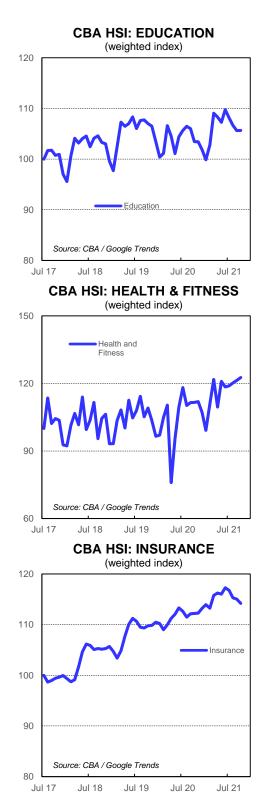
Entertainment spending intentions index

- The Entertainment spending intentions index was up a solid 14.7% in October 2021, but remains in negative territory at -7.2% relative to October 2020.
- Relative to October 2020, the largest increases in Entertainment spending were for: eating out, live theatres, movie theatres and record stores.
- Reduced spending relative to October 2020 was seen for: music stores, book stores, photo studios, bowling alleys, video arcades and aquariums.

Travel spending intentions index

- The Travel spending intentions index jumped by a very strong 52.7% in October 2021, and is now up 13.5% on an annual basis.
- Relative to October 2020, October 2021 saw decreases in Travel spending for: hotels, motels & resorts, trailer parks & campgrounds, tourist attractions, sport and rec camps, bus lines and airports.
- These declines were offset by a number of spending categories that suggest a more positive outlook for the future, including; travel agents, airlines (off a low base), cruise lines (off a very low base) and motor home and RV rentals.





Education spending intentions index

- The Education spending intentions index was unchanged in October 2021, and relative to October 2020 is up a very modest 2.1%.
- While actual spending on education in October 2021 was little changed relative to October 2020, there was a small increase in Google searches related to education.
- Improvement in actual spending in October 2021 relative to October 2020 was seen for school and educational services. Spending on elementary and secondary schools was down marginally, but with larger falls evident for spending on trade & vocational schools, colleges, universities & professional schools, correspondence schools and business & secretarial schools.

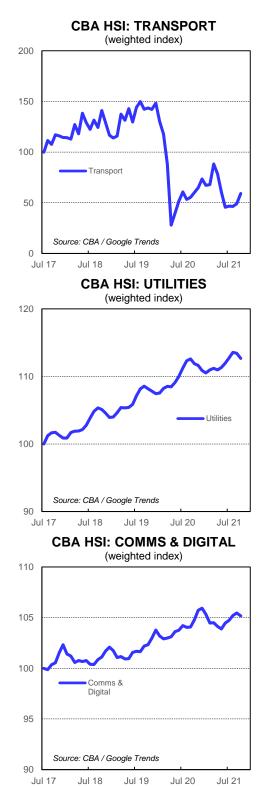
Health & fitness spending intentions index

- The Health & fitness spending intentions index improved by 1.0% in October 2021. Relative to October 2020 the index is up a solid 9.9%, with actual spending up marginally but with stronger gains seen for Google searches related to both health and medical services.
- Relative to October 2020, Health & fitness spending intentions in October 2021 rose for: doctors, health & beauty spas, bike shops & services, professional sport, public golf courses and orthopaedic services and devices.
- These increases were partly offset by lower spending for: memberships for sports clubs, hospitals, medical labs and ambulances.

Insurance spending intentions index

- The Insurance spending intentions index was softer in October 2021 at -0.7%, but remain slightly higher than the levels seen in October 2020 at +1.8%.
- Spending intentions in this sector have been volatile during the Covid-19 period and although they have remained positive, the pace of growth has been on a generalised downward trend.





Transport spending intentions index

- The Transport spending intentions index shows further signs of improvement in October 2021 and was up a strong +20.7%/mth.
 Relative to October 2020, however, Transport is still lower at -1.5%.
- Relative to October 2020, increases in spending in October 2021 were seen for: service & fuel stations, taxi & limousine service, car washes, freight carrier & trucking and towing services.
- These increases were offset by declines in the annual rate of spending on: commuter passenger services, including rail & ferries, toll & bridge fees and car rentals.

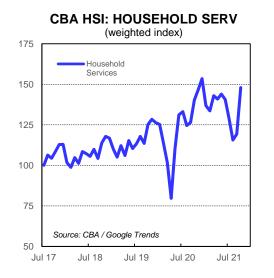
Utilities spending intentions index

- The spending intentions index for utilities was down a marginal -0.7% in October, but was a little higher than October 2020 at +0.7%.
- Actual spending on utilities was lower in October 2021 relative to September 2021, but higher than in October 2020. Google searches related to oil & gas were higher on an annual basis in October 2021, while Google searches related to renewables & alternative energy sources were unchanged on the year.

Communications & digital spending intentions index

- The Communications & digital spending intentions index was little changed in October 2021 at -0.3%/mth and up a marginal +0.4% relative to October 2020.
- Relative to October 2020, increases in spending were seen for: computer software stores, pay TV and digital games, books and Apps.
- This was partly offset by reduced spending for; telecommunications services, computers and video amusement games suppliers.





Household services spending intentions index

- The spending intentions index for Household services also improved in October 2021, up a strong 24.1%. Relative to October 2020, the improvement is a more modest 5.5%. The annual increase was driven by both an increase in actual spending and in Google searches for home & garden services and home improvement services as the economy begun to reopen.
- Relative to October 2020, increases in spending in October 2021 were seen for: beauty & barber shops, vets and cleaning services.
- This was offset by declines in spending on: child care, landscaping services, pest control and carpentry services.

Household Spending Intentions (HSI):

When we launched the Household Spending Intentions (HSI) series in July 2019 the idea was not only to focus on what Australians were spending money on, but what they intend to spend money on. To do this, the Commonwealth Bank has an advantage. With over 16 million customers and using an ongoing sample of more than 2.5 million households, the CBA generates a significant amount of close to "real time" data on how the economy is travelling.

This information relates particularly to the household sector – the dominant sector of the economy, including spending, income, savings and lending. All these internally generated data points are coincident indicators of economic activity, although they are leading indicators in a publication sense – as we receive and publish insights using this data well ahead of the official data releases from the Australian Bureau of Statistics.

Of course, as noted above, what we are really interested in is not just what people are spending money on, but what they intend to spend money on. One approach is to ask people about their confidence levels and whether they think now is a good time (or not) to buy. But we think there is a better, more modern way, and that is to use internet searches as an indicator of what people intend to spend money on. To do this we use publically available Google Trends search data.

By combining the internally generated CBA spending and lending data with publically available Google trends search data, the Household Spending Intentions (HSI) provides key insights into both current spending patterns and spending intentions.

When we launched the HSI in July 2019, we covered seven different categories of household spending: Home Buying, Retail, Travel, Health & Fitness, Entertainment, Education and Motor Vehicles. Together these spending categories covered about 55% of total consumer spending in the economy.

After just over two years of the original HSI, the time is now right to expand the series. To do so we have added five new spending categories: Financial and insurance costs, Transport, Utilities, Communications & Digital Streaming and Household Services. Adding these new spending categories has also given us the opportunity to upgrade and re-order the detailed spending sectors included in each category. Full details of what spending is in each category are provided in the tables below.

Introducing the HSI Index:

But perhaps the most significant enhancement in this updated version of the Household Spending Intentions series is the addition of the HSI Index.

Each month we will publish the HSI Index, using the changes in the 12 spending categories, weighted according to their share of household consumption. The index is based at 100 as at July 2017. An index number above 100 indicates that Household Spending Intentions are higher than they were as at July 2017, while a number below 100 indicates weaker spending.

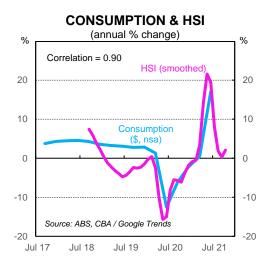
Each month we will publish the HSI Index, as well as the monthly % change and the annual % change. But perhaps more importantly, each of the individual 12 spending categories will also have its own index (based at 100 in July 2017) and we will be able to attribute changes in the HSI Index to each spending category.

We see the HSI Index as a major step-forward in the data available to our clients and the Australian community more generally to help provide insights into the current and future state of household spending.



HSI Index correlation to National Accounts consumer spending:

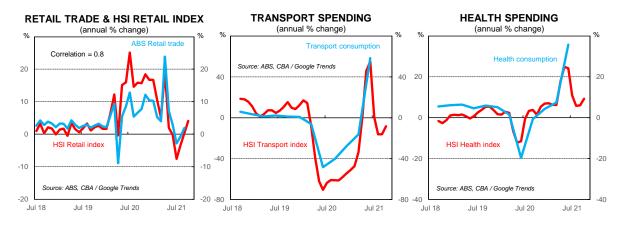
The good news is that the HSI index is very well-correlated with the non-seasonally adjusted National Accounts measure of nominal household final consumption. The correlation coefficient of the two series on an annual change basis is 0.90 for the period from Q3 2018 to Q2 2021. Over that same period, the correlations for other consumption indicators were lower.



The HSI index is a coincident indicator of household consumption. But they are leading indicators in a publication sense. The National Accounts measure of consumption is released just over two months after the end of each quarter. By contrast, CBA's HSI index will be released monthly, at approx. one week after the end of each month (ie. publication is planned for the second Tuesday of each month).

Given the high correlation it is no surprise that a simple linear regression model using the HSI index as the independent variable performs well in fitting to the historical National Accounts consumption data. It explains a far larger share of historical spending than other indicators like consumer sentiment do on their own. The HSI index explains around 80% of the variation in household consumption in the National Accounts. In addition to CBA's internal card spending data, the use of Google Trends data helps to augment the HSI index. In general, adding in the Google search categories improved model performance by around 15%, though this did vary by spending category.

Many of the subcomponents of the HSI index also correlate well with their official statistical counterparts. The HSI Retail index is very well-correlated with the official Retail Trade figures, with a correlation of 0.8. Other spending categories, for instance the HSI Health and Transport indexes also track their respective consumption categories in the National Accounts fairly closely.



A few caveats...

One point to keep in mind is that the history of the HSI is fairly short. So the estimated correlations and relationship with consumption are based on relatively small sample sizes. And the sample would be smaller still if we were to exclude the unusual pandemic period and only consider the HSI's ability to track consumer spending in 'normal' times. It may be the case that the HSI's relationship with consumption is stronger during major turning points, as has been shown to be the case for consumer sentiment. For instance, see this RBA <u>article</u>.



There is another caveat to be aware of. The HSI index and its individual spending category indices are well-correlated to *non-seasonally adjusted* and *nominal* values of consumption. That should not be surprising as the CBA's internal card spending data are a key input into the HSI and so the index reflects actual spending that occurs. But the more relevant economic variables – and importantly, the ones that markets pay most attention to –strip out any seasonal patterns and pricing changes (i.e. they are seasonally and inflation adjusted). However, the history of the HSI is not yet long enough to perform seasonal adjustments. And it is difficult to construct the implicit price deflators that are used to calculate real volumes – for some of these categories of consumption the values and volumes measures can differ substantially.

The 12 HSI 2.0 spending categories in detail:

The full list of 12 spending categories are below and now account for close to 100% of consumer spending.

- 1) Home Buying.
- 2) Retail.
- 3) Motor Vehicle.
- 4) Entertainment.
- 5) Travel.
- 6) Education.
- 7) Health & Fitness.
- 8) Insurance costs.
- 9) Transport.
- 10) Utilities.
- 11) Communications and Digital Streaming
- 12) Household Services.

Home buying:

• CBA Home loan applications for owner occupiers and investors

Retail:

- Alcoholic beverages from package stores.
- Clothing and footwear, including; men, women, children, uniforms, footwear, repairs/alterations and cleaning/laundry services.
- Food and non-alcoholic beverages, including; supermarkets/grocery stores, dairy product stores.
- General retail, including; department stores, duty free and second hand stores.
- Household furnishings and equipment, including; electrical equipment & appliances, furniture, floor coverings, glass, paint/wallpaper, hardware & tools, lumber & building supplies, nurseries, plumbing/heating equipment.
- Jewellery, watch, clock, and silverware stores.
- Luggage and leather goods stores.
- School, stationery and office supply stores.
- Personal care stores.
- Cosmetic stores.
- Electric razor stores.
- Recreation.
- Antique shops.
- Books and newspapers.
- Camera and photographic supply stores.
- Electronic stores.
- Florist supplies, nursery stock, and flowers.
- Pet shops, pet foods, and supplies.
- Tobacco products.

Motor Vehicle:

- Car and truck dealers (new and used) sales, service, repairs, parts and leasing.
- Car and truck dealers (used only) -sales, service, repairs, parts and leasing.
- Motorcycle shops and dealers.

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Entertainment:

- Amusement Parks, circuses & carnivals.
- Aquariums.
- Art dealers and galleries.
- Betting, including lottery tickets, casino gaming chips, off-track betting and race tracks.
- Boat dealers, rentals and leasing.
- Book stores.
- Bowling alleys.
- Caterers.
- Commercial photography, art and graphics.
- Dance halls, studios and schools.
- Drinking places bars, nightclubs, cocktail lounges etc.
- Eating places and restaurants.
- Fast food restaurants.
- Hobby, toy and game stores.
- Marinas, marine service and supplies.
- Motion picture theatres.
- Music and record stores.
- Theatrical producers (except motion pictures) and ticket agencies.
- Video game arcades and establishments.

Travel:

- Airlines and air carriers.
- Airports and airport terminals.
- Bus lines
- Camper, recreational and utility trailer dealers.
- Hotels, motels and resorts.
- Motor home and RV rentals.
- Trailer park and camp grounds.
- Package tour operators.
- Travel agencies and tour operators.
- Sport and Recreation camps.
- Cruise lines.
- Tourist attractions and exhibits.

Education:

- Business and secretarial schools.
- Colleges, universities and professional schools.
- Correspondence schools.
- Elementary and secondary schools.
- Schools and educational services.
- Trade and vocational Schools.

Health & fitness, including

Health:

- Ambulance services.
- Osteopaths, podiatrists and chiropractors.
- Dentists and orthodontists.
- Doctors and Physicians.
- Pharmacies.
- Health and beauty spas.
- Hospitals.
- Medical labs.
- Nursing and personal care facilities.
- Opticians and eyeglasses.



Fitness

- Bicycle shops sales and service.
- Commercial and professional sports clubs.
- Sport, recreation and athletic club membership.
- Public & private golf courses.
- Sporting goods stores.

Insurance:

- Direct marketing insurance services.
- Insurance sales, underwriting and premiums.

Transport:

- Automotive fuels and service stations.
- Automotive associations.
- Automobile rental agencies.
- Automotive body repair, parts and paint shops.
- Automotive service and tyre shops.
- Car washes.
- Motor freight carriers and trucking local and long distance, moving and storage companies and local delivery.
- Parking lots and garages.
- Passenger railways.
- Taxicabs and limousines.
- Toll and bridge fees.
- Towing services.

Utilities:

• Electric, gas, water and sanitary utilities.

Communications and Digital:

- Cable and other pay television services.
- Computer network/information services.
- Computers, computer equipment and software.
- Digital goods: Applications books, movies, music & games.
- Telecommunication services, including local and long distance calls.
- Telecommunications equipment and telephone sales.
- Video amusement game supplies.

Household Services:

- Architectural, engineering, carpentry and surveying services.
- Beauty and barber shops.
- Cleaning services.
- Charitable and social service organisations.
- Child care services.
- Concrete work contractors.
- Electrical contractors.
- Funeral services and crematories.
- Heating, plumbing, and air conditioning contractors.
- Landscaping and horticultural services.
- Masonry, stonework, tile setting, plastering and insulation contractors.
- Roofing contractors.
- Swimming pools--sales, supplies and service.
- Veterinary services.

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Complaints

If you have a complaint, the Bank's dispute resolution process can be accessed on 13 22 21 when in Australia, and +61 2 9841 7000 from overseas.

Global Economic & Markets Research

Stephen Halmarick	Chief Economist - Head of Global Economic & Markets Research	+612 9303 3030	stephen.halmarick@cba.com.au
Commodities		Telephone	Email Address
Vivek Dhar	Mining & Energy Commodities	+613 9675 6183	vivek.dhar@cba.com.au
Tobin Gorey	Agri Commodities Strategist	+612 9117 1130	tobin.gorey@cba.com.au
Economics		Telephone	Email Address
Gareth Aird	Head of Australian Economics	+612 9118 1100	gareth.aird@cba.com.au
Kristina Clifton	Senior Economist	+612 9117 7407	kristina.clifton@cba.com.au
Belinda Allen	Senior Economist	+612 9303 3110	ballen@cba.com.au
Stephen Wu	Economist	+612 99160986	Stephen.Wu@cba.com.au
Fixed Income & Currend	cy Strategy	Telephone	Email Address
Martin Whetton	Head of Fixed Income & Currency Strategy	+612 9303 3557	martin.whetton1@cba.com.au
Philip Brown	Senior Fixed Income Strategist	+613 9675 7522	philip.brown@cba.com.au
Tally Dewan	Senior Securitisation Strategist	+612 9118 1105	tally.dewan@cba.com.au
Elias Haddad	Senior Currency Strategist	+442077105603	elias.haddad@cba.com.au
Joyce Yu	Credit Strategist	+612 9118 1126	joyce.yu@cba.com.au
International Economics	3	Telephone	Email Address
Joseph Capurso	Head of International Economics	+612 9118 1106	joseph.capurso@cba.com.au
Kim Mundy	Senior Economist and Senior Currency Strategist	+612 9118 1107	kimberley.mundy@cba.com.au
Kevin Xie	Senior Asia Economist	+852 2844 7360	Kevin.xie@cba.com.au
Carol Kong	Senior Associate International Economics and Currency Strategy	+612 9303 8274	carol.kong@cba.com.au
Delivery Channels & Pu	blications	Telephone	Email Address
Monica Eley	Internet/Intranet/Bloomberg/Database/Projects	+612 9118 1097	monica.eley@cba.com.au
Ai-Quynh Mac	Information Services	+612 9118 1102	maca@cba.com.au

Sales

stitutional	Telephone	Corporate	Telephone	
/d FX	+612 9117 0190	NSW	+612 9117 0377	
	+612 9117 0341	VIC	+612 9675 7737	
Fixed Income	+612 9117 0020	SA/NT	+618 8463 9011	
Japan Desk	+612 9117 0025	WA	+618 9215 8201	
elb	+613 9675 6815	QLD	+617 3015 4525	
	+613 9675 7495	NZ	+64 9375 5738	
	+613 9675 6618	Metals Desk	+612 9117 0069	
	+613 9675 7757	Agri Desk	1800 633 957	
on FX	+44 20 7329 6266			
Debt & Derivatives	+44 20 7329 6444			
Credit	+44 20 7329 6609			
K	+852 2844 7539			
ng	+65 6349 7074			
Y	+1212 336 7750			