Economic Insights Global Economic & Markets Research

HSI

Household Spending Intentions



10 May 2022

Household Spending Intentions – April 2022

Welcome to the April 2022 edition of the CommBank Household Spending Intentions (HSI) Index. To create the HSI Index we combine CBA internally generated transaction and lending data with publically available Google search terms to provide a view on actual Australian household spending *and* spending intentions.

The HSI series includes 12 spending categories– covering almost all consumer spending. The HSI Index is a single data point that represents the weighted change in the 12 individual spending categories. Changes in the HSI Index are well correlated with the annual change in National Accounts household final consumption and the ABS Household Spending Indicator, but with the HSI Index released well ahead of the ABS data. The HSI Index will, in time, become an important data set for the Australian economy, financial markets and policy makers and is now available on the Bloomberg economic calendar. Refer to the HSI hub at www.commbank.com.au/hsi for further details.

For April 2022, the highlights of the HSI Index include:

- The CommBank HSI Index fell by 3.8%/mth in April, to 112.3 after a record high in March. There were falls in Home buying, Health & fitness and Transport. Travel, Entertainment and Retail rose.
- The Home Buying index fell by 21.5%/mth after strong gains in March and is now lower over the year by 13.1%.
- The Health & fitness category fell by 14.0%/mth, but is still up 2.9%/yr.
- The Transport category fell by 8.6%/mth, largely as expected due to the reduction in the petrol excise. It remains 13.5% higher over the year.



Spending Category	Mthly change %	Yr change %
Home Buying	-21.5	-13.1
Health & Fitness	-14.0	+2.9
Transport	-8.6	+13.5
Household Services	-4.3	+11.3
Motor Vehicle	-2.2	-4.5
Education	-2.1	+5.2
Communications & Digital Streaming	-0.5	+1.1
Utilities	-0.1	+0.6
Insurance costs	+0.3	+1.3
Retail	+0.3	+10.4
Entertainment	+6.0	+1.8
Travel	+10.6	+41.0

- The Household Services category fell by 4.3%/mth, likely driven by seasonal factors due to more public holidays in April. It is +11.3%/yr.
- The Motor Vehicle category fell by 2.2%/mth and is lower by 4.5%/yr as supply shortages continue to impact new car sales.
- The Education category fell by 2.1%/mth, but is up 5.2%/yr.
- The Communications & digital streaming category fell by 0.5%/mth, but is up by 1.1%/yr.
- The Utilities category is down by 0.1%/mth and up 0.6%/yr.
- The Insurance costs category rose by 0.3%/mth and 1.3%/yr.
- The Retail category rose by 0.3%/mth, which is a strong reading with April normally a seasonally weak month. It is up 10.4%/yr.
- The Entertainment category rose by a strong 6.0%/mth, based on strong spending levels and is now 1.8%/yr.
- The Travel category continued its recent strength, rising by 10.6%/mth and is up by 41.0%/yr.

Belinda Allen Senior Economist T. 61293033110 E. ballen@cba.com.au

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HSI Dashboard





HSI Index

- The CommBank HSI Index fell by 3.8%/mth in April to take the index down to 112.3. The fall in April came after a seasonally strong March reading that was boosted by strength in 11 out of the 12 categories. There is volatility month to month in the HSI readings due to seasonal patterns. April is generally weak due to additional public holidays falling in the month. In April 2022 the Easter long weekend and ANZAC Day holidays occurred.
- Falls in April were led by a 21.5%/mth fall in Home buying, with falls also occurring in Health & fitness, Transport spending intentions and Household services. There were gains in Travel, Entertainment and Retail. 8 out of the 12 spending categories fell in April after broad based gains in March.
- Given month to month seasonal volatility, the annual movement is best reflective of the state of the Australian economy. On an annual basis the HSI Index is up 5.0%/yr, although some of this gain is likely reflecting increases in prices.
- The HSI remains solid and is consistent with the RBA commencing its interest rate hiking cycle in May. We expect further interest rate hikes in June, July, August and November 2022 and one final hike in February 2023 taking the cash rate to 1.60%. We expect a fairly shallow hiking cycle compared to market pricing.
- Going forward it will be important to watch the HSI categories, including Home buying, Motor vehicles, Retail and Entertainment to judge the impact of the interest rate rises.

Home buying intentions index

- The Home buying spending intentions index fell by 21.5%/mth in April, after gains in February and March. April is normally a seasonally weak month, but this month was weaker than the average.
- Home loan applications were weaker on the month in April. Google searches related to housing were also generally weaker across the different categories.
- Relative to April 2021, Home buying intentions are lower at -13.1%/yr and down 25% since the peak in March 2021. Dwelling prices have continued to moderate and we would expect this to accelerate now the RBA has commenced its hiking cycle.
- We would expect this category to show the impact of rate rises earlier than others due to the sensitivity of the housing market to interest rates.





Retail spending intentions index

- The Retail spending intentions index rose by 0.3%/mth in April, after a seasonally strong bounce in March. April is generally a weaker month for retail given a string of public holidays. However there appears to have been a relatively solid lift in April.
- There continues to be a shift in consumer spending patterns compared to the pandemic. Areas were consumers lifted spending during the pandemic are now weakening, including curtains & upholstery stores, confectionary, sewing appliances, paint & wallpaper, art supplies, antique shops and glassware & crystal shops.
- In contrast relative to April 2021 there has been a strong lift in spending on duty free stores (from a low base) as well as department stores, speciality stores, family clothing stores and electronic stores.

Motor vehicle spending intentions index

- The Motor vehicle spending intentions index fell by 2.2%/mth in April after two consecutive monthly gains. It is now down 4.5%/yr.
- On the month, there were falls in the number of new & used motor vehicles purchased, a decrease in loan applications and a fall in Google searches.
- Relative to April 2021, motor vehicle spending intentions have now turned lower. In terms of new cars, supply chain constraints remain a large impediment to purchasing a new vehicle. At the same time this has placed upward pressure on used car prices which could be lowering the demand.
- This will be an important category to watch as car purchases have the strongest elasticity to wealth effects. With interest rates now rising we do expect the housing market price cycle to turn lower.

Entertainment spending intentions index

The Entertainment spending intentions index rose by a strong 6.0%/mth in April after also rising in March. April is normally a weaker month for Entertainment spend, so this result appears strong in that context.



- On an annual basis, Entertainment spending intentions remain lower, down by 1.8%/yr. Compared to April 2021 the most significant declines in Entertainment spending are for: music stores, marinas, boat dealers & rentals, amusement parks and tent & awning shops.
- This is partly offset by increases in spending on: record stores, bands, motion pictures, caters, theatrical productions, aquariums as well as eating & drinking out. All signs that spending patterns continue normalise post the worst of the pandemic.





Travel spending intentions index

- The Travel spending intentions index rose another very strong 10.6%/mth in April and are now 41.0%/yr higher than in April 2021. Travel spending now exceeds its pre Covid peak and reached a new record high in April. This once again is a further sign that consumer spending patterns are normalising.
- April 2022 saw a meaningful increase in the number of travel related transactions, the value of these transactions and Google searches related to accommodation and tourist destinations.
- Relative to April 2021, the largest sources of increased spending was for: travel agents (off a very low base), airlines & airports, cruise ships (also off a low base), tourist attractions, hotels & motels and bus lines. The only area of decline was for camper & RV rentals. This suggests the type of travel is reverting back to more normal patterns now state and international borders are reopen.

Education spending intentions index

- The Education spending intentions index fell by 2.1%/mth in April, only partly reversing some of the strength seen in March 2022. Over the past year the category is 5.2% higher. Part of the recent strength could be in the lift in tuition fees for university courses.
- In April 2022 there were falls in Education spending transactions as well as Google searches related to education. Generally we see March is a strong month with the start of new university term.
- In the year to April 2022 increases were seen in spending on: primary and secondary schools while all other categories remain soft.

Health & fitness spending intentions index

The Health & fitness spending intentions index fell by 14.0%/mth in April, reversing the gains seen in February and March. Over the past year the index is up by 2.9%/yr. April saw a decrease in both the number and value of Health & fitness transactions and a fall in Google searches related to this sector.



- Relative to April 2021, the largest increases in spending were seen for: pharmacies, health & beauty spas, opticians, commercial sports, massage parlours and sporting goods stores.
- This was partly offset by softer spending on: hearing aids, nursing & personal care facilities, chiropractors, dental and ambulance services (which is a good thing).





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Insurance spending intentions index

- The Insurance spending intentions index was up a modest 0.3%/mth in April and is just 1.3%/yr higher relative to April 2021.
- We would expect that the extensive and ongoing floods in NSW and Queensland will impact on this sector in coming months. In the longer term climate change risk and the impact on weather patterns will be a key factor.

Transport spending intentions index

- The Transport spending intentions index fell by 8.6%/mth in April, after significant gains in recent months.
- There are two keys factors impacting this category at present; changes to petrol prices and the fuel excise tax. Second a lift in mobility as people return to the office. The fall this month would relate to the cut in the petrol excise tax announced at the March Budget.
- Relative to April 2021, Transport spending intentions are up a solid 13.5%.
- But, as can be seen in the chart, despite the strong recovery in Transport spending intentions in recent months, they still remain well below the levels seen pre-Covid in 2019.
- Relative to April 2021, the strongest increases in Transport spending was seen for: service stations and taxis, the two largest spending sub categories. There were also increases in spending on parking garages, passenger railways, motor vehicle supples & parts and freight carriers.
- This was partly offset by weakness in spending on: commuter transport, including buses, light-rail and ferries and toll and bridge fees.



Source: CBA / Google Trends

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Jul 20

Jul 21

Jul 22

Utilities spending intentions index

- The Utilities spending intentions index declined by a small -0.1%/mth in April and is now 1.3%/yr higher than April 2021.
- There were falls in both spending and Google searches in April. After reaching a peak in August 2021 there has been a steady fall in the series.







Communications & digital spending intentions index

- The Communications and digital spending intentions index fell by 0.5/mth in April and is up just 1.1%/yr.
- Both the number and value of spending in this sector was down in April, as were Google searches.
- In the year to April 2022, increases were seen in spending on: digital games, digital Apps, pay TV services, digital books, movies & music and video amusement game supplies.
- This was partly offset by declines in: computers & software, telephone services and computer maintenance & repairs.

Household services spending intentions index

- The Household services spending intentions index fell by 4.3%/mth in April, but remains 11.3% higher over the year. April saw a fall in both the number and value of transactions related to household services. This is no surprise given the string of public holidays in April. The fall in April 2022 was around the normal April fall (excluding April 2020 during the national lockdown).
- Relative to April 2021, the largest increases were seen in spending on: charitable organisations, veterinary services, swimming pools, landscaping, masonry & stonework, roofing services and beauty & barber shops.
- This was partly offset by declines in spending for: carpentry contractors, electrical contractors, exterminating services and cleaning 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 also intended 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 was right in November 2021 to expand the series. To do so we added five new spending categories: Insurance costs, Transport, Utilities, Communications & Digital and Household Services. Adding



these new spending categories 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 the updated version of the Household Spending Intentions series was the addition of the HSI Index. Each month we 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 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 also has its own index (based at 100 in July 2017) and we are 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. Significantly, this data is now available on Bloomberg and will appear each month in the Bloomberg calendar of economic events.

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 consumption¹. The correlation coefficient of the two series on an annual change basis is 0.94 for the period from Q3 2018 to Q4 2021. Over that same period, the correlations for other consumption indicators were lower. The following chart shows the strong correlation in the HSI Index with the recently released Q4 21 National Accounts data.



The HSI index is a coincident indicator of household consumption. But the HSI index is a 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 on the second Tuesday of each month with data for the preceding 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.

¹ With thanks to Stephen Wu for his correlation work.



In addition, the ABS has recently released a new experimental monthly household spending indicator. New higher-frequency data from the ABS is welcome because it allows for timelier insights into how the Australian economy is performing. The ABS indicator is constructed using bank transactions data, so it is no surprise that the ABS' indicators is well-correlated with our own CommBank Household Spending Intentions (HSI) index (see chart below).

The advantage of the CommBank HSI index remains, however, our broader coverage and the fact that the CommBank HSI index is published well ahead of the official ABS data.



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.

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. ٠
- Commercial photography, art and graphics. ٠
- Dance halls, studios and schools. ٠
- Drinking places bars, nightclubs, cocktail lounges etc. ٠
- Eating places and restaurants. ٠
- Fast food restaurants. ٠
- 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. ٠
- Bus lines •
- Camper, recreational and utility trailer dealers. ٠
- Hotels, motels and resorts. ٠
- Motor home and RV rentals. ٠
- Trailer park and camp grounds. ٠
- Package tour operators. ٠
- Travel agencies and tour operators. ٠
- Sport and Recreation camps. ٠
- Cruise lines. ٠
- Tourist attractions and exhibits. •

Education:

- Business and secretarial schools. •
- Colleges, universities and professional schools. •
- Correspondence schools. ٠
- 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. ٠
- Hospitals. ٠
- Medical labs. •
- Nursing and personal care facilities. ٠
- Opticians and eyeglasses. ٠

Fitness

- Bicycle shops sales and service. •
- Commercial and professional sports clubs. •
- Sport, recreation and athletic club membership. ٠
- Public & private golf courses. •
- Sporting goods stores. ٠

Insurance:

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

Transport:



- Automotive fuels and service stations. ٠
- Automotive associations. •
- Automobile rental agencies. ٠
- Automotive body repair, parts and paint shops. ٠
- Automotive service and tyre shops. ٠
- Car washes. ٠
- 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. ٠
- Computer network/information services. ٠
- Computers, computer equipment and software. ٠
- 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. ٠
- Beauty and barber shops. ٠
- Cleaning services. ٠
- Charitable and social service organisations. ٠
- Child care services. ٠

- Concrete work contractors. ٠
- Electrical contractors. .
- Funeral services and crematories. ٠
- Heating, plumbing, and air conditioning contractors. ٠
- Landscaping and horticultural services. •
- Masonry, stonework, tile setting, plastering and insulation contractors. ٠
- Roofing contractors. ٠
- 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.

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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
Belinda Allen	Senior Economist	+612 9303 3110	ballen@cba.com.au
Stephen Wu	Economist	+612 9916 0986	Stephen.Wu@cba.com.au
Harry Ottley	Associate Economist	+612 9118 1107	Harry.Ottley@cba.com.au
Fixed Income & Curren	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	Financials and Securitisation Strategist	+612 9118 1105	tally.dewan@cba.com.au
Elias Haddad	Senior Currency Strategist	+442077105603	elias.haddad@cba.com.au
International Economic	S	Telephone	Email Address
Joseph Capurso	Head of International Economics	+612 9118 1106	joseph.capurso@cba.com.au
Kristina Clifton	Senior Economist and Senior Currency Strategist	+612 9117 7407	kristina.clifton@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	
Syd 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	
lelb	+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			
ing	+65 6349 7074			
Y	+1212 336 7750			