

Household Spending Intentions

7 December 2021



Household Spending Intentions – Nov 2021

Welcome to the second edition of our new CommBank Household Spending Intentions (HSI) Index. With the launch of the HSI in July 2019 we combined CBA internally generated transaction and lending data with publically available Google search terms to provide a view not only on what Australians were spending money on, but also what they intended to spend money on.

While the initial HSI series covered seven different spending categories, with the launch of the HSI Index, we now cover 12 spending categories – taking the HSI coverage to almost all consumer spending. The other major enhancement is the introduction of the HSI Index – a single data point that represents 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 www.commbank.com.au/HSI for further details.

For November 2021 the highlights of the HSI Index include:

- The CommBank HSI index rose 2.1%/mth in November, to be at 110.3, led higher by Transport, Travel, Retail and Household services, partly offset by a decline in Home buying.
- The Home buying index was down a sharp -27.5%/mth in November and is now down -17.6%/yr. This result was likely impacted by some slowing in demand and seasonal factors.
- The Retail index was up a solid 9.6%/mth in November and is now up 5.6%/yr.
- The Motor vehicle index was a marginal -0.5%/mth lower in November, but is up a very strong 37.5%/yr.
- The Entertainment index was up a solid 8.5%/mth in November, but remains down on an annual basis at -6.6%/yr.
- The Travel index was up a strong 14.7%/mth in November and is up a very strong 25%/yr.
- The Education index was up a modest 1.9%/mth in November and is marginally higher on the year at 2.1%/yr.
- The Health & fitness index was up a solid 7.1%/mth in November and is now up 12.8%/yr.
- The Insurance costs index was up a modest 0.5%/mth in November and is marginally higher at 3.0%/yr.
- The Transport index was up a very strong 21.5%/mth in November and is now up 39.4%/yr.
- The Utilities index was down a marginal -0.2%/mth in November and up a low 0.9%/yr.
- The Communications & digital index was up a marginal 0.2%/mth in November and is down a modest -0.8%/yr.
- The Household services index was up a strong 9.4%/mth in November and is now up a solid 9.8%/yr.

CommBank HSI Index

November 2021

110.3

+2.1% / mth



+4.5% / yr



The 2.1% rise in the HSI Index in November was driven by an increase in Transport, Travel, Retail and Household services, partly offset by a decline in Home buying.

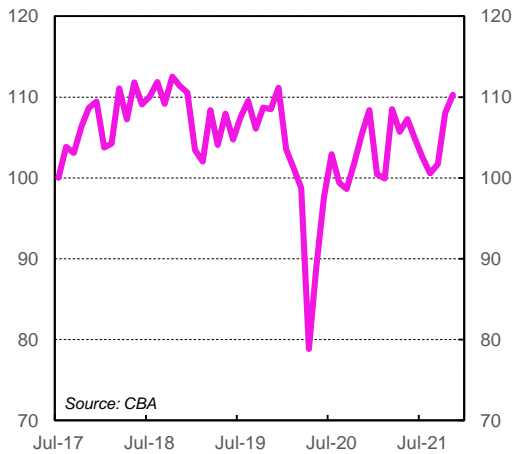
Spending Category	Mthly change %	Yr change %
Home Buying	-27.5% ↓	-17.6% ↓
Retail	+9.6% ↑	+5.6% ↑
Motor Vehicle	-0.5% ↓	+37.5% ↑
Entertainment	+8.5% ↑	-6.6% ↓
Travel	+14.7% ↑	+25.0% ↑
Education	+1.9% ↑	+2.1% ↑
Health & Fitness	+7.1% ↑	+12.8% ↑
Insurance Costs	+0.5% ↑	+3.0% ↑
Transport	+21.5% ↑	+39.4% ↑
Utilities	-0.2% ↓	+0.9% ↑
Communications & Digital Streaming	+0.2% ↑	-0.8% ↓
Household Services	+9.4% ↑	+9.8% ↑



HSI Dashboard

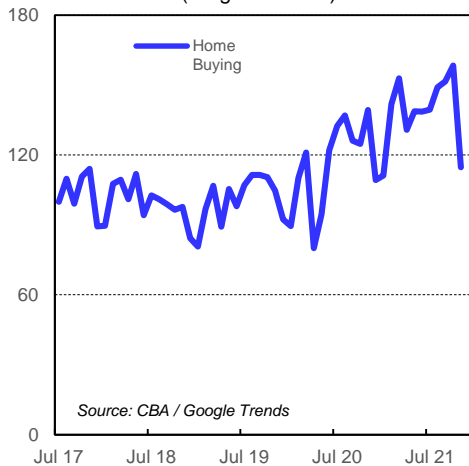
CBA HSI: INDEX

(weighted index = 100 July 2017)



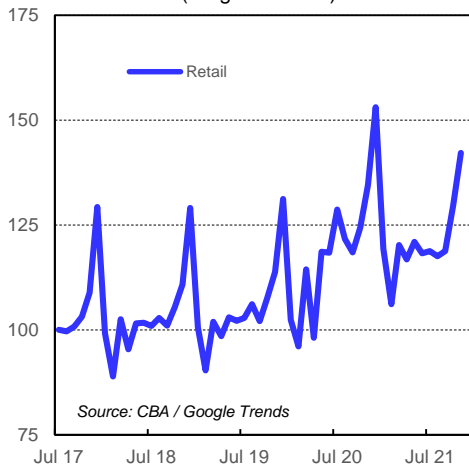
CBA HSI: HOME BUYING

(weighted index)



CBA HSI: RETAIL

(weighted index)



HSI Index

- The CommBank HSI Index was up 2.1%/mth in November, to 110.3. On an annual basis the HSI Index is up 4.5%/yr.
- At 110.3 the HSI Index is now at its highest level since December 2019 (which was 111.1). That is, the HSI Index has now recovered all the lost ground caused by the arrival of Covid-19 and the subsequent economic lockdowns.
- The increase in the CommBank HSI Index in November was driven by solid gains in Transport (+21.5%/mth), Travel (+14.7%/mth), Retail (+9.6%/mth) and Household services (+9.4%/mth). This was partly offset by sharp decline in Home buying (-27.5%/mth).
- On an annual basis, the CommBank HSI Index is up 4.5%/yr. This was driven by strong gains in Transport (+39.4%/yr), Motor vehicles (+37.5%/yr), Travel (+25%/yr) and Home buying (+17.6%/yr). This was partly offset by a decline in Entertainment (-6.6%/yr).

Home buying intentions index

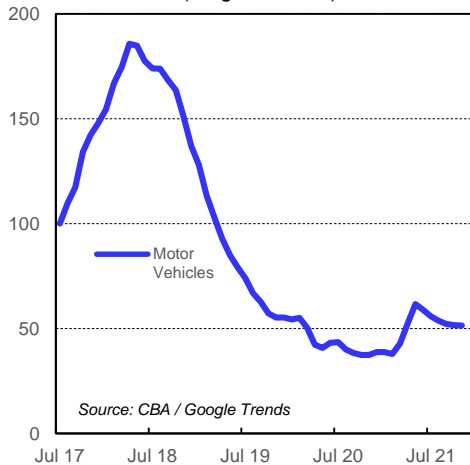
- The Home buying spending intentions index dropped by a sharp -27.5%/mth in November, although it still remains up by 17.7%/yr. The decline in the Home buying spending intentions index in November was on the back of lower CommBank home loan applications and Google searches related to home buying.
- The extent of this decline is likely to have been over-stated. Seasonal factors as we head into Christmas are likely at play, as well as there being only four weekends in November, after five weekends in October.
- However the recent data is also showing a moderation in demand for housing, particularly by owner-occupiers. Dwelling prices in Australia were up 21.3%/yr to November but the pace of monthly gains has slowed. The slowdown in Home buying spending intentions in November supports our view that prices are likely to be a more modest 7%/yr in 2022. For 2023 we expect dwelling prices to be down -10%/yr as higher interest rates take effect.

Retail spending intentions index

- Retail spending intentions continued to improve in November, up a further 9.6%/mth after solid increases in October as the NSW and Victorian economies re-opened from the Delta lockdowns. Relative to November 2020, the Retail spending intentions index was up a solid 5.6%/yr and is now up 21% from the Delta lockdown low in August 2021.
- Gains on the year were driven by increases in spending on: department stores, men's & women's clothing, furniture & household equipment, electronic stores, household appliances, jewellery & watch stores, pet shops, shoe stores, newsagency, hardware, florists and luggage & leather goods. This was partly offset by softness in: packaged alcohol, window coverings, nursery & garden supplies, arts & crafts and antique stores.
- In a sign that people are spending more money on end-of-year events, there was an increase in November this year v's November 2020 for cosmetics, tailors & alterations and clothing rentals.
- The gain in the Retail spending intentions index in November points towards a strong Christmas shopping period. This will be supported by the accumulation of excess household savings during the Covid-19 period, which CBA estimates at \$A240bn as at Q3 21.



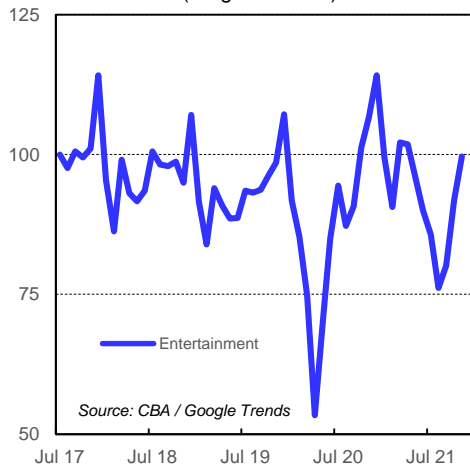
CBA HSI: MOTOR VEHICLES
(weighted index)



Motor vehicle spending intentions index

- The Motor vehicle spending intentions index was down a marginal - 0.5%/mth in November. This reflected an increase in the number of motor vehicles purchased and a small increase in loan applications, offset by a decline in Google searches. On an annual basis, motor vehicle spending intentions are still up a solid 37.5%/yr.
- In our view, part of the decline in Motor vehicle spending intentions in November 2021, as well as a very modest increase in personal loan applications for cars, is likely to be associated with global supply-side constraints – with the supply of new cars into Australia significantly impacted.
- With NSW and Victoria now re-open, it will be important to see the supply of new vehicles improve, although there may now be a shift back towards public transport.

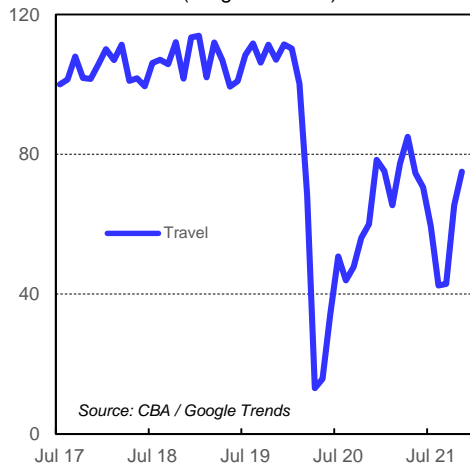
CBA HSI: ENTERTAINMENT
(weighted index)



Entertainment spending intentions index

- The Entertainment spending intentions index was up another solid 8.5%/mth in November 2021, but remains in negative territory at - 6.6%/yr relative to November 2020.
- Relative to November 2020, the largest increases in Entertainment spending were for: live theatre, motion picture theatres, eating & drinking out, fast food, record stores, bowling alleys and motor home dealers.
- Reduced spending relative to November 2020 was seen for: music stores, book stores, photo studios, amusement parks and marinas.

CBA HSI: TRAVEL
(weighted index)

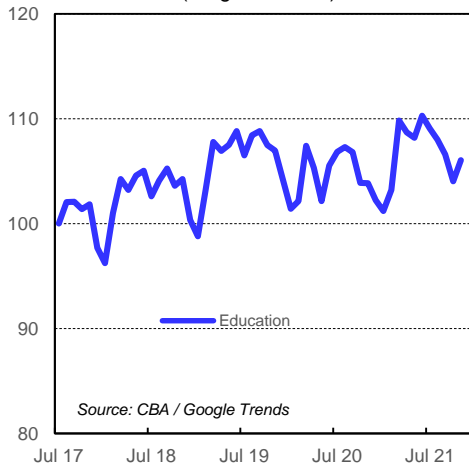


Travel spending intentions index

- The Travel spending intentions index rose by a further 14.7%/mth in November, continuing on from the strong gains seen in October as domestic and international borders reopen. The Travel index is now up a strong 25% on an annual basis.
- Significantly, the Travel spending intentions index is now up 77% from the Delta lockdown low of August 2021, but is still 30% lower than its pre-Covid levels of November 2019.
- Relative to November 2020, November 2021 saw increases in spending on: hotels, motels and resorts, travel agents (off a low base), airlines, tourist attractions, camper and RV dealers and rentals, cruise ships (off a low base), sport and rec camps, bus lines and airports.
- These gains were partly offset by declines in: trailer parks & campgrounds and timeshares.



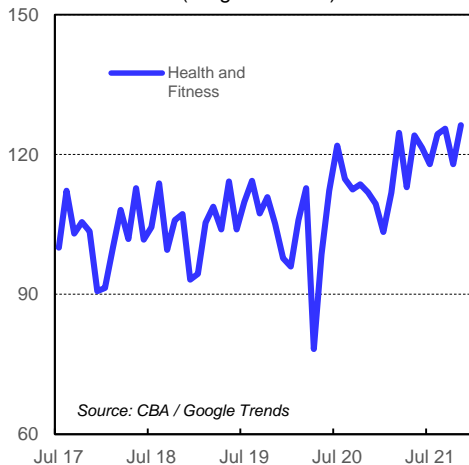
CBA HSI: EDUCATION
(weighted index)



Education spending intentions index

- The Education spending intentions index was up a modest 1.9%/mth in November 2021, and relative to November 2020 is up a marginal 2.1%/yr.
- There was an increase in the number of Education spending transactions in November 2021 relative to November last year, while Google searches related to education were down marginally.
- Improvement in actual spending in November 2021 relative to November 2020 was seen for school and educational services and elementary & secondary schools.
- Relative to November 2020, declines in spending in November were seen for: colleges, universities & professional schools, trade & vocational schools, business & secretarial schools and correspondence schools.

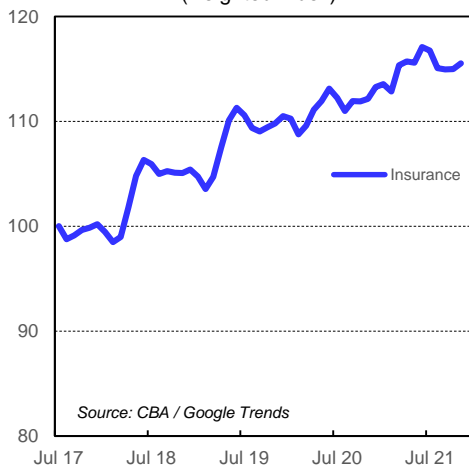
CBA HSI: HEALTH & FITNESS
(weighted index)



Health & fitness spending intentions index

- The Health & fitness spending intentions index increased by a strong 7.1%/mth in November 2021. Relative to November 2020 the index is up a strong 12.8%/yr, with actual spending and Google searches related to both health and medical services up noticeably.
- Relative to November 2020, Health & fitness spending intentions in November 2021 rose for: pharmacies, doctors, dentists, membership sports clubs, optometrists, health & beauty spas, chiropractors, professional sports clubs, podiatrists and osteopaths.
- These increases were only partly offset by reduced spending for: public golf courses (off recent strength), hearing aids and a small decline in ambulance services (which is a good thing).

CBA HSI: INSURANCE
(weighted index)

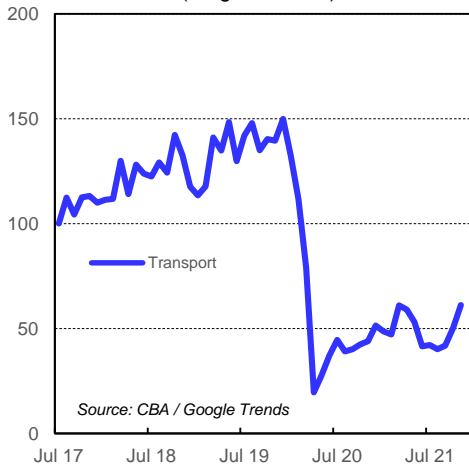


Insurance spending intentions index

- The Insurance spending intentions index was up a modest 0.5%/mth in November 2021, with the annual rate of increase improving to 3.0%/yr.
- Spending intentions in this sector have shown some volatility during the Covid-19 period, with the slight downward trend evident during the Delta lockdowns now seemingly passed.



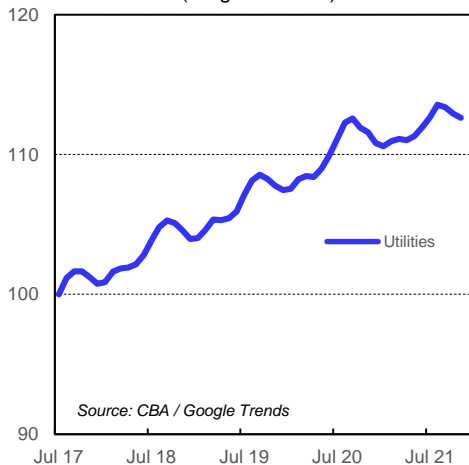
CBA HSI: TRANSPORT
(weighted index)



Transport spending intentions index

- The Transport spending intentions index jumped a strong 21.5%/mth in November 2021 and was up 39.4%/yr relative to November 2020 and up a very strong 52% since the Delta lockdown low of August 2021 as mobility has lifted. However, as shown on the chart to the left, the Transport spending intentions index remains well down on the levels prior to the arrival of Covid-19, ie. the index is 56% lower than November 2019.
- Relative to November 2020, increases in spending in November 2021 were seen for: service & fuel stations, taxi & limousine service, auto tyre stores, parking lots & garages, auto repairs, freight & trucking services and towing services.
- These increases were partly offset by declines in the annual rate of spending on: local & suburban commuter transport, including ferries, car washes, car rental agencies, truck & ute rentals and passenger rail.

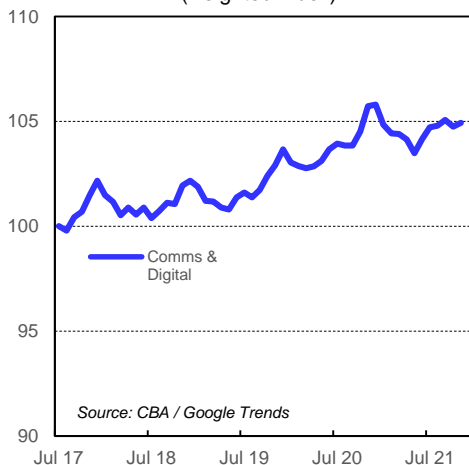
CBA HSI: UTILITIES
(weighted index)



Utilities spending intentions index

- The spending intentions index for Utilities was down a marginal -0.2%/mth in November, but was a little higher than November 2020 at +0.9%/yr.
- Actual spending on utilities was lower in November 2021 relative to October 2021, but higher than in November 2020. Google searches related to oil & gas and renewable & alternative energy were lower on an annual basis in November 2021.

CBA HSI: COMMS & DIGITAL
(weighted index)

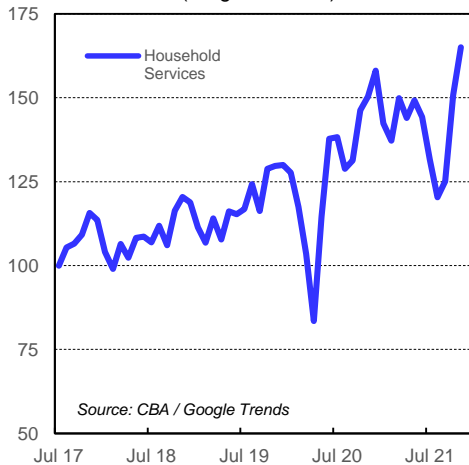


Communications & digital spending intentions index

- The Communications & digital spending intentions index was again little changed in November 2021 at +0.2%/mth, but marginally lower at -0.8%/yr relative to November 2020.
- Relative to November 2020, increases in spending were seen for: computer software stores, pay TV, digital games, books & Apps, computer maintenance and video amusement game supplies.
- This was partly offset by reduced spending for; telecommunications equipment, telecommunications services and computers & software.



CBA HSI: HOUSEHOLD SERV (weighted index)



Household services spending intentions index

- The Household services spending intentions index showed a further strong gain of 9.4%/mth in November, taking the annual change up to 9.8%/yr. The annual increase was driven by higher actual spending and an increase in the number of transactions. This was partly offset by a decline in Google searches related to household services.
- Relative to November 2020, November this year saw spending increases for: beauty & barber shops, vet services, charities, child care services, funeral services, masonry & tile services, roofing services, electronic repair services and furniture repairs.
- This was partly offset by lower spending on: electricians, landscaping services, air conditioning services and carpenters.

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 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 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.

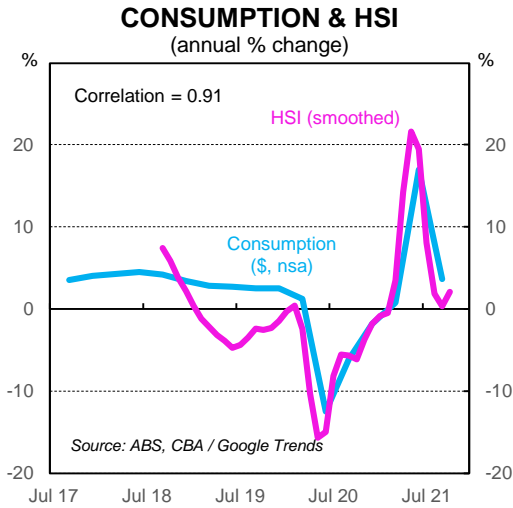
Each month we will publish the HSI Index, as well as the monthly % change and the annual % change. But perhaps more importantly, each of the individual 12 spending categories will also have its own index (based at 100 in July 2017) and we will be able to attribute changes in the HSI Index to each spending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

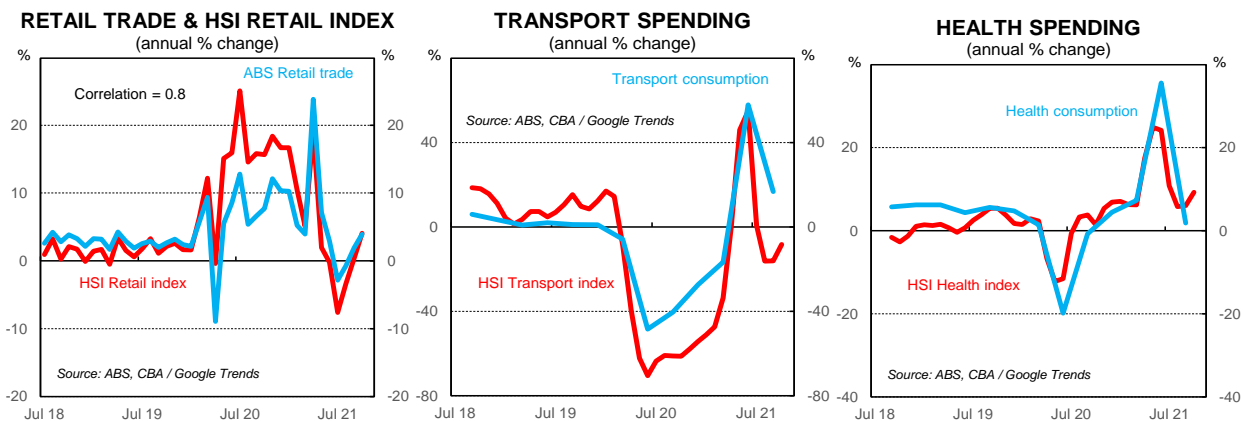
The good news is that the HSI index is very well-correlated with the non-seasonally adjusted National Accounts measure of nominal household final consumption¹. The correlation coefficient of the two series on an annual change basis is 0.90 for the period from Q3 2018 to Q3 2021. Over that same period, 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

¹ With thanks to Stephen Wu for his correlation work.



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 [article](#).

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.
- 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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