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FTMA Trussted Insight

WHY THE PIPELINE OF WORK AND THE PACE OF BUILDING REALLY MATTERS

WITH TIM WOODS OF INDUSTRYEDGE

IndustryEdge

Why the pipeline of work and the pace of building really matters

Home building is tough right now and its taking a long time. Here is what's going on

This edition of Trussted Insight was prepared in the cold light of the days after the collapse of the volume home builder, Porter Davis. That unfortunate and unwelcome event provides some pointers about what is wrong with the building system deployed in most of the Australian economy. It also supplies some clues about where to from here, in what is shaping up to be a tough and rapidly evolving home-building sector.

The 'profitless boom' coming home to roost

Without looking under the hood of Porter Davis, it is not possible to make an informed judgement about what happened to that business, specifically. Instead, we can make some general observations about the challenges for home builders in the modern era.

First, we can be certain that fixed price contracts, coupled with rising input costs is a recipe for poverty. That is the 'profitless boom' that the industry was discussing as far back as mid-2020.

Second, general inflation has risen very quickly and as we commented in Trussted Insight in February, that has driven input prices up even further, or in some cases, held them stable when they might have been expected to fall.

Third, and we think most importantly, the delays that are now seemingly built into the supply chain for building free-standing houses are changing the financial viability of participation in the building process. That is, if the time it takes to build a house pushes out, the value of the contract is reduced, both by inflation and by what's known as economic 'friction'.

Economic friction occurs when instead of flowing smoothly and in an orderly manner, the system of work (or flow of money, or whatever) slows down so much that resources and labour are wasted by the delays and ensuing chaos, costing more and locking in further delays.

An example might be a house with its frames and trusses up, but the windows are delayed, causing a delay in cladding, which delays lock-up, which only becomes clear to the plasterers when they turn up and find there is little work they can do. Their labour is under-utilised, and they reasonably expect to be paid for it anyway, as its not on them that the delays occurred. It gets worse from there, because the joiners and cabinetmakers, water-proofers, tilers, painters and final fix teams and so on are also all delayed thereafter.

Doubtless we can all think of other examples. None is a disaster in its own right, however added up and applied across a company, or an entire economy, it can quickly be a serious problem.

Economic friction can be a form of feedback loop and IndustryEdge argues, that's where we are right now. Every time there is a delay that forces itself down the supply chain, it creates new delays, adding time costs, but not getting the work done. There may be some sympathy for large builders finding themselves in these situations, but we suspect not too much. Mainly because it's a well-known and largely predictable outcome and the larger builders have the capability to understand that and adjust their selling practices accordingly. As one industry leader said: "…over selling by larger builders has been a self-inflicted wound that has cost consumers, suppliers and tradies."

Evidence of friction in the housing economy

The best evidence we have of economic friction in the housing supply chain is anecdote. Plenty of people are telling the story right now. It seems most of that is downstream or comes after the process of framing the dwelling or putting the trusses up.

That does not mean your stage of the process is immune from delays. You can suffer them as many of you tell us, and you can also contribute to them, as we all know.

However, frames and trusses are early in the process of building, with less of the building elements coming before them, so there is less room for unexpected delays. The further along the supply chain you go, the more opportunities there are for delays to creep into the system.

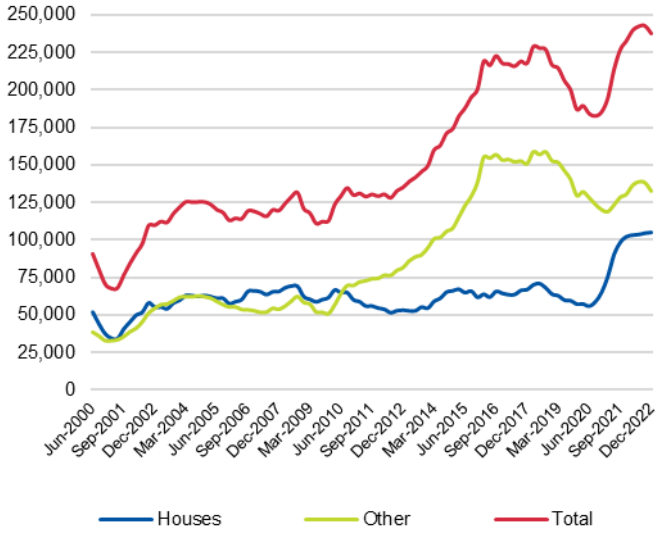
On the other side of the equation, frames and trusses are a large, physical, observable element of most dwellings and their absence is less likely to go unnoticed than the windows not having been delivered, or some other element of the supply chain that is further downstream.

Beyond the anecdotes, the latest housing pipeline data, released just a week ago, provides us 'system-wide' evidence there is an excess of economic friction in the housing economy. The housing pipeline is the amount of work that is in progress or in the system at any point in time. Unfortunately, this is lagging data, up to the end of 2022, but it is startling for all that.

At the end of 2022, Australia had 237,491 dwellings under construction – that was 2.1% higher than at the end of 2021 but is thankfully a fraction lower than the record 242,518 dwellings under construction at the end of September 2022.

Despite approvals slowing through most of 2022, by the end of the year, there was a **record** 105,111 houses under construction, more than double the long-term average. Fortunately, the combined multi-residential formats under construction were lower, at 132,380 dwellings under construction. They at least may have turned the corner.

Dwellings Under Construction by Main Type: JQ'00 – DQ'22 (Number)

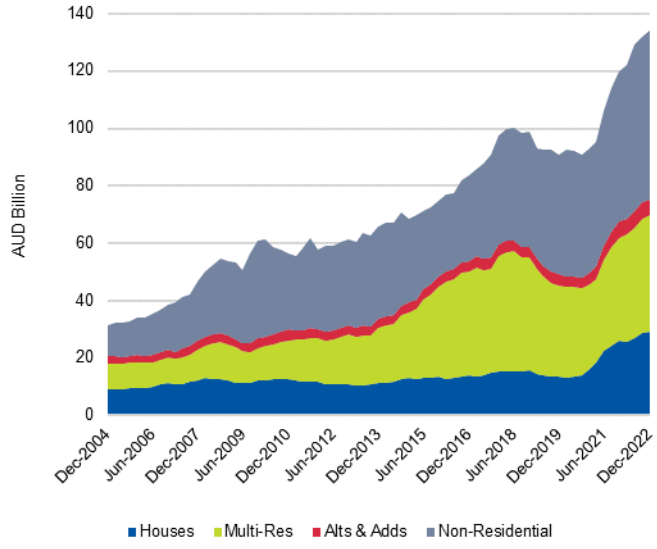


Source: ABS, derived and IndustryEdge

It is worth having a quick look at the value of the work in the pipeline because we suspect it provides some clues about why houses in particular, are proving hardest to build in a timely fashion. Free-standing houses are important, but they accounted for just 22% of the total value of work under construction in the December quarter. By contrast, multi-residential dwellings accounted for 30% and combined non-residential for 59%.

It is possible, and we think that it is likely, that at an economy wide level, spare resources (labour, money, materials) are being soaked up by the other sectors, ahead of free-standing houses. The reason would be because there's more money in those sectors than there is in the increasingly profit-drained free-standing house building sector.

Value of Building Work Under Construction: DQ'04 – DQ'22 (AUD Billion)



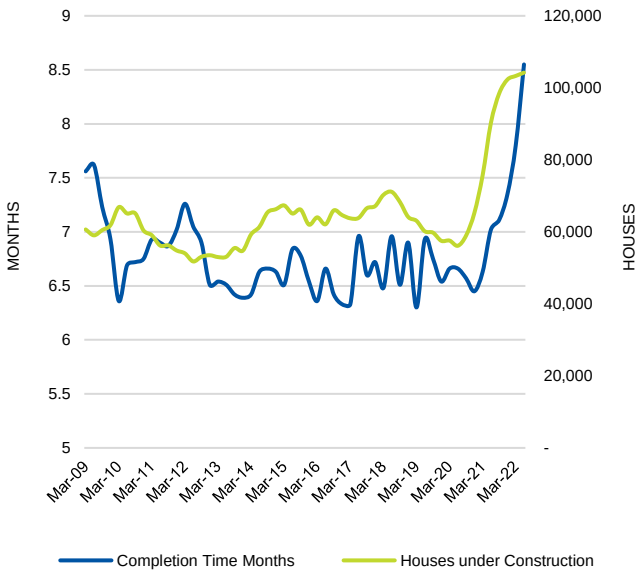
Source: ABS, derived and IndustryEdge

Houses are fairing worst

When it comes to a pipeline of work, the simple reality is that houses are hardest to build and are most limited by the system of work used to manufacture them. It's pretty much stand-alone and linear, with too many dependencies built into the system. A delay in one element is a delay to all and each has a cost.

Although the latest data is only up to June 2022, it is clear there is a direct relationship between the time it takes to build a free-standing house and the number of houses under construction. It may be obvious, but as the number of houses in the pipeline grows, it takes longer to build the average house, as we can see below.

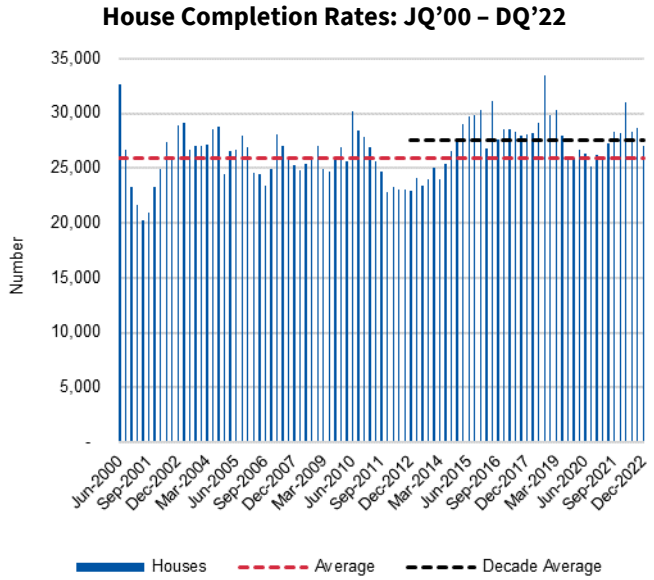
Houses Under Construction and Average Completion Times: MQ'09 – JQ'22



Source: ABS, derived and IndustryEdge

Over the very long term, Australia has been able to build an average 25,980 houses per quarter, never having exceeded 33,438. You would expect the more recent average would have shot up, but that has not been the case. The last decade, Australia has managed to build an average 27,540 houses per quarter. The decadal peak was just over 31,000, back in the June quarter of 2016.

Against the current pipeline, even with no new approvals, there would still be around twelve months of free-standing houses to build.



Source: ABS, derived and IndustryEdge

The grim news from the data appears to be that Australia has very little system capacity to build dwellings at a faster rate.

A major consequence is that far from reducing, the pipeline of houses under construction is continuing to expand.

The pipeline of free-standing houses under construction may begin to slow and even turn around in the next couple of quarters, as has been the case for multi-residential dwellings. One driver of a declining pipeline of work – and this would add to potential sector woes – could be that as some builders fail, the 'take over' builder re-prices the job and the intended buyer is no longer able to afford it or get finance for it.

For many – builders, fabricators and others – a gradually contracting pipeline of work could prove to be too late.

From what we can see, all the data shows that free-standing houses are the dwelling format taking longest to build on a dwelling-by-dwelling basis. They remain the preferred housing format by type, but that comes at a cost that seems little understood: they take longest to build, use resources least efficiently (for the most part) and are probably lower margin than most multi-residential building formats.

If history proves to be any guide to the future, one thing seems certain: the number of free-standing houses we build each quarter is not going to grow significantly. Australia does not have the labour, and when it does, the other building sectors probably soak it up. Meantime, the anecdotes tell us there is labour available, but its going to those builders who pay properly and on time and whose jobs are well organised as a buffer against the economic friction.

Beyond labour, you need trucks (and drivers, so more labour), warehouses, equipment hire businesses and gear, basic supplies and so on.

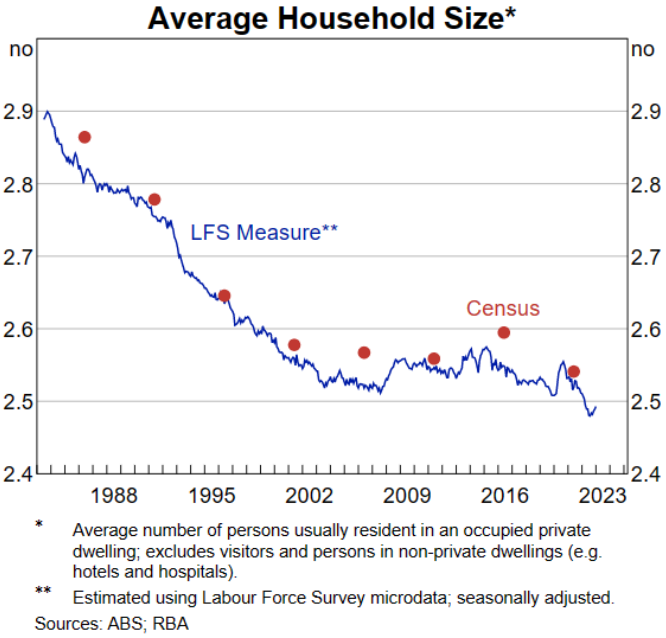
It is, in short, difficult to accelerate the pace at which house building occurs, and for the most part, the Australian economy has not done that very well in the past. Incremental gains are possible and even likely, but they will probably be too slow for the housing we need to build.

What does this tell us?

In all this slow-paced crawl to build the current pipeline of work, what it is easy to miss is that we still have a surplus of demand, or insufficient supply. Rental costs are sky-rocketing, and not just because of inflation, and certainly not only because of a return to some modest level of migration, now the pandemic is mainly past us.

One factor driving demand is the number of people per household is declining. The latest data from the RBA shows there is now an average of 2.55 people per household, down from 2.6 in 2016. A small change, but one that increases demand by about 120,000 dwellings right now and increases demand on a continuing basis.

Rather than recreate the RBA chart, we'll let it tell its own story below.



We have plenty of demand – more than ever before – but we cannot build free-standing houses at a rate that will sustain that demand, or a pace that appears to be genuinely profitable.

Meantime, multi-residential properties – and these include townhouses – are being built faster and are growing their share of the total market, using less resources, going up faster, deploying more pre-fabricated components and generally, housing marginally less people, on a tighter land-use footprint than a traditional free-standing house.

We can expect to see increased approvals of multi-residential properties through the next decade, for a variety of reasons, including the appallingly slow rate at which we build houses.

There are, of course, differences across the nation, between the cities on the one hand and between the cities and the regions on the other hand. Land costs for example are lower in most regional areas, so the costs of larger houses over a bigger footprint are less obvious.

The point is that the conclusion below may not apply to all situations, but the better point, is we should never ignore the data!

It would be a very brave person who predicted the end of the traditional free-standing house in Australia, but increasingly, we suspect it would be an equally brave new builder who would choose to start out building those houses over more efficient multi-residential dwellings. The same could be argued for fabricators.

There are things fabricator businesses can do – and many are already doing – to contribute to more efficient building of free-standing houses, but the take up of those efficiencies and value-adds

appears to be faster and more consistent in the multi-residential housing formats, including townhouses.

As the pipeline of housing work shows us, the pace (and therefore cost) at which we build dwellings matters more than at any time in modern history. The system used to build free-standing houses does not appear to be as fit for the purpose of housing the nation, as the emerging and more rapidly evolving system used to build multi-residential properties.

Unless free-standing house building lifts its game, improves its efficiencies and speeds up its delivery of the product, it will be swamped by continued improvements in multi-residential dwellings. The counter to that is the need to ensure the price for the work incorporates taking on more of the risk of the building process.

For fabricators intent on continuing to contribute to building the nation, the efficiency of the total building system and the differences between the formats, needs to be front and centre in their consideration. Your business cannot afford to be anchored in what appears to be an increasingly old economy but can benefit from embracing the changes that are observable in the modern sectors of the Australian housing economy.

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