Rethinking housing as productive, economic infrastructure

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Productivity
You know what it is!

- Productivity is: a measure of the effectiveness of the use of resources in the production of outputs.
- Different Scales: at the micro level of individual enterprises (social housing provider, builder) or the (meso) overall sector (e.g. construction); more commonly in economic policy estimated at macro metro-regional and national level.
- Measured: at micro levels by various ‘what works’ approaches: at macro by estimating production functions, a physical relationship between measured inputs and measured outputs,
  \[ Q = Q(K, L, X) + e \]
given values by applying factor and product prices.

Thinking productivity matters for housing …
Future productivity growth
Critical for Australia

Across the OECD raising productivity and reducing inequality are the (re)-emerging challenges. For Australia:

- High growth in GDP per capita over last three decades:
- Reflects strong terms of trade, favourable demographic
- A reliance on capital deepening, more capital per worker
- But Multi-Factor productivity (innovation) has been poor

Future trade, demography less favourable. Productivity has to grow to ensure economic competitiveness and wellbeing. Housing matters in this because...
The future is here!

- Cities not just ‘big’ share of the economy
  - Agglomeration for labour (Glaeser), innovation
  - Density, Scale economies in services, infrastructure
- But also where key growth constraints bite
  - Not just planning, but also
    - Infrastructure, including housing

Whilst at the same time
- Regional cities face problems of decline some
- Rural regions are in long run decline
- Resource rich regions face highly cyclical local economies

Failing to deal with these imbalances raises inequality and reduces productivity.
Housing’s importance noted, then ignored

Major Cities Unit usefully recognised these arguments but governments

- Apply them only to infrastructure, transport, Lowe (2013)
- Other nations do same re ‘infrastructure’; ‘housing’ excluded from definitions, seen as ‘social’, ‘displacement’

and housing sector, possibly short on economic competence and interest

- Fails to lobby effectively on productivity and housing as economic infrastructure

Lobbies, and governments often not clear where to start on the issue. So where?
Housing approach

Approach essential given housing sector weight in economy: investment, debt, assets spending:

- Adopt a bottom-up perspective
- But ensure reaches from local to global
- Essential to adopt a MOG view
  - Critical to recognise metro economic policy roles
- Start with logic chains

Housing is difficult, don’t be too reductionist, don’t throw out baby with bathwater
Housing as economic infrastructure: logics

- Recognise that ‘housing’ applies to ‘process’ as well as ‘characteristics’ outcomes. Both can have growth effects
- Breakdown housing ‘characteristics’ into
  -> Housing: size, comfort, style
  -> Location: jobs, play, schools, shops (see transport)
  -> Metropolitan supply: quality, availability
  -> Prices, rents, price changes
- Connect detailed attributes to productivity factors… human capital, business capital, innovation… (and repeat for processes)
Housing, outcomes, growth

- housing
  - characteristics
    - availability
    - human capital
  - processes
    - prices
    - spill overs
  - business capital
  - innovation
  - land
  - human capital
  - business capital
  - innovation

Australian Housing and Urban Research Institute (AHURI)
Macro approach

Estimates in Infrastructure from production functions

- At national scale, Aschauer (1988, 1990)
  - Suggest strong impact
  - Now questioned, new methods, new data

- Recently, convincing metro-regional estimates; estimates are location, sector specific, not universal

- Often claims the housing gains! (commuting)

For housing,

- few macro estimates, no convincing modelling approaches
- Make case from micro and metro levels
City, regional level

Clear evidence on

- Residential density and productivity (2-8pc of GDP)
  - Labour markets effects
  - Innovation systems

- Net advantages, housing costs and location
  - Wage Inflation
  - Distorting away from most productive locations
  - Higher housing costs reduce spending on tradeable goods with higher returns to scale

- Higher housing output rates can generate labour skills
Homes and neighbourhoods

- **Housing Size, Comfort, Amenity**
  - Impacts on health, learning ability (Human K)
  - Impacts on energy use, costs, carbon production (Natural K, K)
  - Effects on Home business formation and growth (BK)

- **Neighbourhood and Location** (Separating selection and neighbourhood effects important)
  - Social capital formation, trust (K)
  - Teenage school and work performance (HK)
  - Employer address discrimination (HK)
  - Time spent travelling to fulfil household activity pattern (gain claimed by transport!), (HK)
  - Quality and variety in n’hood: Florida ‘boho’ effects

- **Price and Rent effects on growth**: need a whole new essay
Evidence, practice

Method

- A review of local area and metropolitan economic development plans
- Interviews with policy-makers on how productivity issues might shape thinking on housing policies
- Initial screening of local government economic development and housing strategy plans—63 Victorian and 140 WA plans
- The 25 selected local governments were drawn from regions with diverse economic conditions to facilitate comparisons between five key area types

Key Questions

- Do housing strategies consider economic drivers of change, assess impacts, and do economic development plans link to housing provision?
- What are the key housing issues that are seen to affect economic development at the local area and metropolitan levels?
- How is housing leveraged to promote local economic development?
Area types

These five key area types are:

- Inner to middle metropolitan areas, where economic conditions are typically healthy;
- Outer metropolitan areas, where economic conditions are less robust and expansion in employment opportunities would be welcome;
- Regional tourism towns, marked by distinct seasonal peaks and troughs in economic conditions;
- Regional resource rich towns, where the mining boom has contributed to labour shortages;
- And finally, regional slow growth areas, where labour markets are slack.
Key findings

The issues and policy developments: 5 themes emerge

- The shift to mixed land use activity centres and housing diversity
- Home-based economic activities
- Rising land values and displacement of economic activity
- Housing affordability, demographics and labour markets
- House prices, debt and economic resilience
Key conclusions (1)

- Though housing, productivity and economic development relationships are under-researched it turns out that policy makers are well aware of their importance in a variety of different local economy contexts.
- In most cases we have little if any evidence documenting the importance or otherwise of the issues these relationships raise.
- For example, there are few Australian estimates of agglomeration economies that are an important motivation for precinct and cluster ideas about mixed use land planning.
- Our reading of economic development and housing strategy plans also highlights some concerns about the implementation of policy.
Key conclusions (2)

- There needs to be a better informed housing dimension to local economic development visions, strategies and assessments
- The practice of planning is inadequate in relation to the contemporary tasks of understanding and regulating market driven housing systems. In the housing context, there is a reliance on demographically deterministic models that offer firm annual forward estimates of housing investment requirements, but ignore the consequences for price, rents and other market outcomes.
- As a consequence, the economic implications of housing strategy plans are neglected.
- A new conversation on economic development and housing is needed within local/state bureaucracies and a housing outcomes-productivity impact assessment has to lie at the heart of that change.
- These lessons equally need to be learned and housing understood as essential economic infrastructure at local, state and federal levels, in fiancé and housing divisions, and in the major housing lobby and education groups too.