

**Sub 001 Phil Hayward – Submission – received via email**

**From:** Phil Hayward [<mailto:philhayward@vodafone.co.nz>]

**Sent:** Thursday, 11 April 2013 1:58 p.m.

**To:** Info Productivity; Murray Sherwin; [dave.heatley@me.com](mailto:dave.heatley@me.com)

**Cc:** Nevil Gibson; 'Don Brash'

**Subject:** Productivity: services sector and urban economy

Dear Productivity Commission,

Re the latest issues paper, "Boosting productivity in the services sector".

I would like to suggest something in response to:

Q21. What other policy issues have an important impact on productivity in the services sector?

There is a connection between productivity and urban planning.

I note your paper's definition of "agglomeration economies". They are not necessarily synonymous any longer to "clustering" in close physical proximity. Agglomeration economies below the level of "the entire city" are very elusive to identify. More on this below.

Free markets actually find their own balance between agglomeration economies and congestion and land rents (in the "economic rent" sense of the term; that is, zero sum wealth transfer). Congestion, labour cost pressures, and economic rents all drive decentralisation. Agglomeration economies are of multiple *types*. It is wrong to expect all of them to locate at the same centralised, high-land-rent location. Garment manufacturers quit Manhattan decades ago, for good reasons.

Having a number of *different types* of agglomerations spread through an urban economy, maximises the agglomeration economies and minimises the congestion dis-economies. It also minimises the economic rent cost of land to businesses and households, and minimises labour cost pressures. Hence, individual businesses choices of locations tend to evolve in the direction of dispersion. Furthermore, agglomeration economies need not involve close proximity of the participants. "Connectivity" is the crucial thing. "A few minutes car trip" substitutes, in Silicon Valley, for Manhattan-ites elevator ride, walk, and subway ride, to interact face to face with other participants in the "agglomeration". And telephoning, emailing and other communications now substitute for still more, not based on proximity or transport at all.

The only sectors that remain centralised and high density, are the few with high incomes and low requirements for space, and a tradition regarding “face to face contact”.

Agglomeration economies have effectively been detached from actual *spatial “clustering”* in many parts of the economy, due to advances in technology. Agglomeration economies are probably no more than “economies of scale” in “connectivity”. At one time, “connectivity” mostly involved “proximity”. But transport and communications have continually substituted for proximity. The extent to which this substitution has occurred, depends on the type of business. The consequence is that agglomeration economies still exist, and indeed are stronger than ever, in many sectors where actual physical “clustering” is weak. But economists looking for agglomeration economies purely in terms of physical clusters, will not find them. Even in the *finance sector*, Drennan and Kelly (2011) could only find evidence of agglomeration economies in the few very largest clusters.

Even regarding spatially-identifiable “clusters” of complementary activities, agglomeration efficiencies are *higher* when there are multiple clusters *by type*, rather than a single one of all types of employment. Agglomeration efficiencies are known to be of several different types anyway. It is completely unnecessary for production line manufacturers to be located nearby to law firms, for example, to achieve agglomeration efficiencies. (In fact, urban planners have for generations, been “zoning” against undesirable mixtures of activities in urban areas). Silicon Valley is the classic example of the “suburban” cluster of complementary businesses and activities. And under the conditions of *multiple nodes* or clusters of agglomeration, congestion externalities are minimized at the same time as agglomeration efficiencies are at the very least “not foregone”.

It is a pity that the book/paper “Business Location in Today's Economy” by Richard Mudge, 1998, is almost unknown. I have a copy and can forward it.

In his talk in Wellington a few weeks ago, Paul Cheshire of the LSE mentioned that agglomeration economies had been found by some researchers to be “portable”; that is, people who have been involved a powerful agglomeration, take some of the “economies” with them when they migrate somewhere else. I recently read a magazine article about a broker for a Wall St firm who works from home – on a ranch thousands of miles away from Wall St.

There are even “networks” *between cities* that are clearly identifiable “by economic sector”. The work of Dieter Laepple in Germany is highly relevant. I can forward two papers/essays by Laepple.

But agglomeration economies correlated to outright city size, clearly exist. This is probably because of the multitude of ways in which different urban activities “complement” each other. But dis-aggregating the agglomeration economies of specific sectors in which physical proximity is of low importance, is no longer possible – estimates that are based on spatial data will omit the agglomeration efficiencies that are still present, only based on factors other than proximity.

<http://www.economist.com/node/21564536>

Concrete gains.

America’s big cities are larger than Europe’s. That has important economic consequences.

".....Differences in metropolitan populations may help explain gaps in productivity and incomes. Western Europe’s per-person GDP is 72% of America’s, on a purchasing-power-parity basis. A recent study by the McKinsey Global Institute, the consultancy’s research arm, reckons that some three-quarters of this gap can be chalked up to Europe’s relatively diminutive cities. More Americans than Europeans live in big cities: there is a particular divergence in the size of each region’s “middleweight” cities, those that teem just a little less than the likes of New York and Paris (see chart). And the premium earned by Americans in large cities relative to those in the countryside is larger than that earned by urban Europeans....."

The McKinsey Institute Paper is HERE:

[http://www.mckinsey.com/insights/mgi/research/urbanization/us\\_cities\\_in\\_the\\_global\\_economy](http://www.mckinsey.com/insights/mgi/research/urbanization/us_cities_in_the_global_economy)

And "The Economist" hits the nail on the head in their second-to-last paragraph:

".....What explains Europe’s relatively small cities? Regulatory barriers to growth may be to blame. Tight zoning rules limit housing supply and raise prices by driving a wedge between construction costs and market prices. This “regulatory tax” amounts to over 300% in the office markets in Frankfurt, Paris and Milan, according to a 2008 study by Paul Cheshire and Christian Hilber of the London School of Economics, but is just 50% in Manhattan and, in effect, zero in fast-growing places like Houston. Taxes that add to transaction costs also help explain low European mobility....."

The Cheshire and Hilber paper is HERE:

[http://eprints.lse.ac.uk/4372/1/Office\\_space\\_supply\\_restrictions\\_%28LSERO\\_verse%29.pdf](http://eprints.lse.ac.uk/4372/1/Office_space_supply_restrictions_%28LSERO_verse%29.pdf)

And what "The Economist" does not say about the Cheshire and Hilber paper, is that the "regulatory tax" in UK cities is several times as high again, as in Europe's cities. The absurd consequence of the UK's many more decades of urban planning, as Cheshire and Hilber point out, is that small, low-growth, high-unemployment cities in the UK have more expensive office rents than Manhattan.....!

In the context of housing, as I have been arguing from other literature, this too is more expensive in small, low-growth, high-unemployment cities with growth constraint regulation, than it is even in some of the most productive parts of US cities.

These things have consequences. These costs are a drag on the "productive" part of the economy, they are only a "gain" - in the form of zero sum wealth transfers - to a rentier class.

The McKinsey Institute Paper suggests that there is no single path to growth in a city and its productivity. The USA has a multitude of different types of city, and this is a massive advantage to its economy overall. The existence of Houston and Dallas and Atlanta and "sprawling" low-cost low density cities is not something that the US economy succeeds "in spite of", it succeeds "because of" the absence of regulatory prohibition on the evolution of such city types.

Further pointers in the right direction, come from Peter Gordon's recent paper, "Thinking About Economic Growth: Cities, Networks, Creativity and Supply Chains for Ideas".

[http://www-bcf.usc.edu/~pgordon/pdf/THINKING ABOUT GROWTH BLINDED MS JUNE 26.pdf](http://www-bcf.usc.edu/~pgordon/pdf/THINKING_ABOUT_GROWTH_BLIINDED_MS_JUNE_26.pdf)

Peter Gordon et al's series of papers on urban dispersion and trip-to-work times over nearly 30 years, show that the dispersion of employment in US cities has kept trip-to-work times stable at the same time as an absence of controls on expansion has kept land affordable for businesses and housing. The land market finds its own balance between "agglomeration" efficiency, and the inefficiencies of congestion and high land rents. Gordon suggests (heresy...!) that there is an observable correlation between *dispersion* and productivity in his data.

Another factor that has influenced urban dispersion is that the price of farmland has been steadily falling in "real" terms relative to urban incomes, and the factor over 5 decades is something like "4". This means that even if households are still spending about the same proportion of their income on "housing", they can consume a lot more space, or put the gains towards the size and quality of the structure. Of course zoning and growth-containment central planning interrupt this evolutionary relationship.

Likewise with businesses. There are businesses in which "space" can be utilised to increase productivity. The McKinsey Institute (1998) found one reason for the UK's low productivity is that businesses there are prevented from doing this by the very inflated land rents. Indeed the whole sectors that require more space to be internationally competitive, tend to have been strangled altogether.

Zero sum economic land rent is really likely to be associated with foregone agglomeration economies. There is positive sum economic land rent: that which accrues to the owners of land as the economy in which the land holding is embedded, experiences gains in productivity and incomes and physical size. Zero sum (and indeed negative sum) land rent is what results when regulatory distortions allow land owners to capture a greater share of income that existed anyway.

The UK urban economist Alan W. Evans (University of Reading) may have been the first to insist that there was a connection between the UK's urban planning system, "land rent", and its relative economic decline. I note the Productivity Commission making comparisons in its issues paper, between the UK and NZ – but the UK is already a laggard compared to comparably developed countries.

The following is from Evans' "The Land Market and Government Interventions" (1999):

".....With respect to the UK, Monk et al. (1996) observe that, because planning constraints reduce the elasticity of supply, the land-use planning system in the UK exacerbates cycles in house and land prices (p. 509). It has also been argued that they have significantly slowed the growth of the UK economy (Evans, 1988), and although this would be difficult to prove, nevertheless, given that local authorities have deliberately set out to restrict the growth and movement of firms (Evans, 1992), it would also seem difficult to deny. We have already noted that, in any event, Cheshire and Sheppard (1997) estimate the static costs of containment in southern England as equivalent to a 10% tax on incomes. The oddity is that because macroeconomists have little interest in town planning, planning controls are rarely cited by economists as one of the causes of the slow rate of growth of the British economy....."

While the above work was in progress, a McKinsey Institute paper was published in 1998, "Driving Productivity and Growth in the UK Economy", in which they suggest that a high proportion of the UK economy's low productivity (lagging comparable nations by 20% to 40%) is in fact due to the UK's all-pervasive urban planning system. There are a few basic reasons for this.

Firstly, increased congestion.

Secondly, by businesses inability to afford "space" for efficient processes eg workers crowding each other, stock on shelves being less accessible, aisles narrower,

production lines too cramped. I have worked, years ago, in a business whose efficiency was hamstrung by the inability to afford more space, to the constant frustration of the staff. There are probably thousands of ordinary people who can relate to this concept.

Thirdly, by “anti-competitive” effects: including not just a reduction in new business start-ups, but also that most potential participants in spatial “agglomerations” are excluded very soon after such an agglomeration has even started; there is either no spare land at the location, or it is far too expensive.

In the urban-economics literature, analyses of “contiguous” development versus “splatter” or leapfrog development, have always concluded, going back decades, that the latter is *more efficient* (Note 1). This is because the “best use” for land is far easier to discern after there has already been some development around and beyond it. It is the insistence on “contiguity” that leads to a dense urban carpet effect and in fact makes infrastructure upgrades and expansion and “churn” of land use to more efficient uses, too expensive and disruptive.

Eg:

Max Neutze, (1987) "The supply of land for a particular use"; Urban Studies Vol 25 (5)

S. Titman, (1985) "Urban Land Prices Under Uncertainty"; American Economic Review, Vol 75 (3) (June).

Richard B. Peiser, (1989) "Density and urban sprawl", Land Economics, Vol 65

J. C. Ohls and D. Pines, (1975) "Discontinuous Urban Development and Economic Efficiency"; Land Economics Vol 51 (3)

M. Fujita, (1976) "Spatial Patterns of Urban Growth: Optimum and Market"; Journal of Urban Economics Vol 3 (3)

J. E. Moore and L. Wiggins, (1990) "A Dynamic Mills heritage model with replaceable capital"; Papers in Regional Science Vol 61 (1)

The findings of the McKinsey Institute were built on by Alan W. Evans in a book published in 2004, “Economics and Land Use Planning”. I have recommended this book and a companion volume by Evans in the same year, to the Productivity Commission before.

Evans’ 2006 submission to the Barker Inquiry covers some of the ground:

[http://www.hm-treasury.gov.uk/d/barker2\\_2006\\_universityofreading\\_98kb.pdf](http://www.hm-treasury.gov.uk/d/barker2_2006_universityofreading_98kb.pdf)

Evans, and co-author Oliver Hartwich (now in Wellington....!) authored a later paper, "The Best Laid Plans: How Planning Prevents Economic Growth" (2007), which is available online:

<http://www.policyexchange.org.uk/images/publications/the%20best%20laid%20plans%20-%20jan%202007.pdf>

And to date there is a whole series of excellent papers from Paul Cheshire and various colleagues at the LSE. There is a good summary paper, "What we Know (and Don't Know) about the Effect of Planning on Economic Performance", by Max Nathan and Henry Overman. It includes references to the LSE's research over the years. A slightly later version is here:

[http://www2.lse.ac.uk/researchAndExpertise/units/growthCommission/documents/pdf/contributions/lseGC\\_SERC\\_planning.pdf](http://www2.lse.ac.uk/researchAndExpertise/units/growthCommission/documents/pdf/contributions/lseGC_SERC_planning.pdf)

Further new research is constantly discussed on the LSE's "Spatial Economics Research Centre" blogspot.

The ability of a few outlier cities to continue to perform well economically in the face of high land costs, is discussed in literature such as "Superstar Cities" by Gyourko, Mayer and Sinai, or "The Flow of Money and Its Impact on Local Economies" by William Fruth. Most cities, most of the time, do not have the luxury of the long-standing, mature, sources of income in sectors with low land requirement that a few do – such as London. The UK government is the world's strongest opponent of Tobin taxes, because there is nowhere in the world that would be harder hit in its own local incomes, than London. And London is also the UK's capital city, with bureaucrats incomes and all the assorted hangers-on. There is hardly any city in the world that can so thumb its nose at the idea of *attracting* messy, CO2-emitting industries and their workforces, to its locale. Yet the many cities in the UK that *need* to do just that, are turned by the Town and Country Planning system, into something inimical. I often call some of the UK's cities, "Detroit with unaffordable housing and land".

The UK economy would greatly benefit from a "Houston" policy approach somewhere that is currently moribund. (So would NZ). Prof. Paul Cheshire told me personally a few weeks ago when in Wellington, when I raised this with him, that he and his colleagues have for years been trying to persuade any UK city that will listen, to do something like this.

In so far as the services sector is a significant portion of the NZ economy, the question is begged whether this size is a normal free market outcome or the result of distortions to the economy, particularly the ones that are responsible for

restricting the “tradables” sector. How much of the NZ services sector is dependent on unsustainable forex imbalances and increases in private (and public) debt? Might not its large size and relatively low productivity be contributed to by the fact that the workforces and resources used by it would be better used elsewhere in a less distorted economy? NZ might have a “large services sector” more as a matter of default, just as Bangladesh has a “large carpet weaving industry sector”.

Most of the employment sectors in the urban economy, most of the time, require a lot more land per dollar of income than finance, media and bureaucracy. Preventing these sectors and their workforces from "escaping the tyranny of rent" will result in exactly what we see in cities in developing nations where corruption (whether masquerading as "planning" or not) has prevented genuinely competitive automobile based development. Sweatshop workforces, "informal" housing, an entrenched socially-immobile underclass, and an extremely wealthy "rentier" class.

An already-developed economy that attempts to reverse the paradigm of automobile based development, "sprawl", land rent minimisation, and the unleashing of sectors whose productivity is boosted by the use of lower-cost land, will tend to experience ongoing creeping "comeback" of the third world conditions described above. The UK's cities are the classic example; their urban planning system having repudiated "competitive automobile based development" back as far as 1947. London is the most resilient of their urban economies under these conditions precisely because it is the city with the strongest concentration of high-income, low-land-cost sectors anywhere in the world. This is small comfort to the people of Liverpool, Birmingham, Newcastle, etc, where the high-land-requirement employers of lower-skilled workforces (often producing for export or for import substitution) have been shut down or shut out by the planning system and the grossly inflated land costs that result.

Yours faithfully

Phil Hayward

Lower Hutt