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KPMG

Tax Depreciation – non-residential buildings

Report to Property Council New Zealand

8 February 2010

AUDIT ▪ TAX ▪ ADVISORY

Contents

KPMG

1 Introduction

The Tax Working Group ("TWG") in its report, *A Tax System for New Zealand's Future*, considered that one (targeted) option for broadening the tax base would be:

Removing tax depreciation on buildings (or certain categories of buildings) if empirical evidence shows that they do not depreciate in value.

This analysis is prepared to help answer the question: do buildings (or certain categories of buildings) depreciate? It has been prepared on behalf of the Property Council New Zealand (PCNZ), a not for profit organisation that represents New Zealand's commercial, industrial, retail, property funds and multi unit residential property owners, managers and investors.

PCNZ represents all forms of commercial property and property investment in New Zealand. Its membership ranges from NZX-listed property trusts ("LPTs") to smaller commercial property investors. The commercial and industrial property sector is an important part of the New Zealand productive sector, providing vital infrastructure for New Zealand businesses (i.e. New Zealand Inc).

2 Summary of findings

We believe the answer to the question posed by the TWG: *do buildings depreciate,* is they do depreciate, at least in the context of non-residential buildings (i.e. commercial and industrial property), which is the focus of our analysis. This conclusion is based on:

- Our understanding of the international evidence, including the various economic studies since the late 1970s which have concluded that commercial and industrial buildings broadly depreciate at rates of between 2-4% per annum. These studies were noted in an Inland Revenue and Treasury issues paper on tax depreciation, released in 2004, which concluded that buildings do depreciate.
- More recent international evidence that supports officials' 2004 analysis. These studies suggest that rates for commercial and industrial rates could be higher (and the useful lives of buildings appear to be shortening). We have not found any studies that suggest buildings do not depreciate.
- Qualitative factors, such as: the high-rates of re-development of commercial buildings (particularly in the Auckland and Wellington CBD areas); changes in building technology (i.e. the need to comply with new building standards); and changing tenant preferences (i.e. "Green" buildings for Government and changes in configuration over time, due to the move from individual offices to open plan) which mean that buildings can and do economically lose value over time. Buildings also move across different segments of the market, over their economic life (a prime building in the 1970s will typically be sub-prime property today, all other things held constant).

We believe that the economic cost of removing depreciation on buildings will be borne primarily by the New Zealand business sector. This is based on a high-level breakdown of the $1.3 billion revenue estimate for removing depreciation. We understand approximately 70% of this estimate relates to non-residential property depreciation. In our view, property investors will account for a very small fraction of this (e.g. we have estimated the largest four LPTs, which are a fair representation of the New Zealand institutional property investor market, hold around 3 to 4% of the total building capital stock).

The flow-on implications, from removing depreciation on buildings, will be lower quality of infrastructure (as there would be lesser incentives to reinvest in capital) or higher rents (as landlords look to recover the lost tax deductions). Neither will be a particularly desirable outcome.

New Zealand would be an outlier internationally. We note that the majority of our trading partners, including Australia, Germany, Japan and the United States allow depreciation on (some or all) non-residential buildings. In the race to attract and keep capital, New Zealand would be at a significant disadvantage.

3 Scope of our analysis

The scope of our analysis is limited to the depreciation question around non-residential buildings – broadly commercial and industrial property, such as office buildings, warehousing, manufacturing plant and shopping centres. This reflects the typical asset holdings of PCNZ members.

We have not considered whether residential rental properties depreciate in value (note: hotel buildings and other buildings used for commercial residential accommodation would be treated as non-residential buildings under our definition). We note that there are different dynamics in the residential property market, the most significant being the owner-occupier versus rental dynamic, which may mean the results may be different for this sector.

Our definition of building is the "shell" or physical structure. It does not encompass any chattels, including those attached to the building (such as lifts). We note that chattels are separately depreciable and would be unaffected by any changes to the depreciation of buildings.

This paper also does not explicitly consider the various other property/land-centric taxing options considered by the TWG, such as a land tax or RFRM on residential property investment.

The focus of this paper is purely on whether non-residential buildings depreciate, to answer the question posed by the TWG.

4 Depreciation for tax purposes

Depreciable property is defined in the Income Tax Act 2007 as "*property that, in normal circumstances, might reasonably be expected to decline in value while it is used or available for*

use in [either] deriving assessable income; or in carrying on a business for the purpose of deriving taxable income."

A number of the international studies, which are discussed later on, separate out the depreciation attributable to physical wear and tear (i.e. the deterioration in physical capacity of the building asset) with so-called economic depreciation (which relates to the ageing of an asset and is attributable to factors such as obsolescence). Depending on which type of depreciation is being discussed, the economic profile of loss in value may vary – we note the references to "one hoss-shay", "straight-line" and "geometric" depreciation profiles in the literature. Similarly, we note that the economic literature discusses a range of available depreciation methods, including the "double declining balance" method, depending on the appropriate economic depreciation profile. The different international studies also use different methodologies – some use asset price models, which consider the price of used assets (estimating depreciation as the change in the price of the asset as it ages), while others use a retirement approach (which estimates retirements and withdrawals from the capital stock and use these to estimate the depreciation pattern and rate).

Our definition of depreciation encompasses both the physical deterioration of a building and other environmental factors. As noted above, environmental factors can include changes in building technology, i.e. obsolescence, as well as changes in tenant preferences such as the configuration and internal specification of a building, which will affect a property's value over time. We believe that our comprehensive definition is consistent with the tax definition.

In summary, the value of a building is, broadly speaking, the net present value of the future cash-flows (or rents) that are expected to be derived from a property. Both physical deterioration and environmental factors will impact on this NPV calculation over time.

In theory, the cost of repairing or maintaining a building should be treated as a deductible expense in the year such expenditure is incurred. However, if the work adds to or improves the asset, this may constitute capital expenditure, with the cost having to be capitalised and depreciated over future years. The issue of what constitutes repairs and maintenance and what is a capital improvement is, however, a significant area of concern which needs to be clarified.

5 Separating buildings from land

One popular argument for removing depreciation on buildings is that when combined land and buildings generally appreciate in value; therefore allowing tax depreciation on the structure seems unreasonable.

Such an argument is a significant oversimplification. Land is not depreciable property for tax purposes. To suggest that any appreciation in the value of land is somehow a justification for denying depreciation on the structure is wrong, from a policy perspective. The two should be considered as separate issues. We note that officials have previously supported this approach.

6 TWG analysis

No empirical data on building depreciation rates is presented in the TWG report and there is very little analysis on the costs versus benefits of removing tax depreciation on buildings. We are also unable to find any TWG background papers, prepared by Inland Revenue or Treasury, on this issue. (We discuss in the next section some analysis carried out by officials in 2004.)

6.1 The rental housing tax bias

The TWG's depreciation recommendation appears to be linked to a perception by the Group that rental property investment is tax advantaged – we refer to the statement in the TWG report, widely quoted in the media, that:

There is … a very large investment in rental properties, where overall this $200 billion sector of the economy had a negative taxable return of about $500 million in 2008.

In our view, the TWG's building depreciation recommendation appears to be aimed squarely at addressing the perceived shortcomings in the taxation of residential rental housing. As noted earlier, consideration of whether residential rental investment is tax advantaged is outside the scope of our analysis. If there is an issue with the taxation treatment of rental housing, this should be addressed as a specific targeted measure. (We note, for example, that some other jurisdictions differentiate between residential and non-residential buildings, allowing tax depreciation only on the latter.)

We believe a clear distinction needs to be drawn between the residential rental sector and the commercial and industrial property sector, which provides the core infrastructure for New Zealand's businesses. In contrast to residential rental property owners, we understand the commercial and industrial property sector is a net tax payer and contributor to the New Zealand economy.

Unfortunately, the perception is that all buildings should be included in the scope of any depreciation change. This is not helped by the fiscal implications being based not only on removing depreciation on residential rental properties, but all buildings – we discuss the costings in greater detail later on. This seems an illogical leap from the "solution" the TWG appears to be recommending to a very narrow problem. This is particularly so, given the various overseas studies which show that buildings do depreciate. We discuss some of this international evidence below.

7 Evidence from the 2004 officials' issues paper on depreciation

Our starting point has been to revisit the 2004 Inland Revenue and Treasury officials' issues paper, *Repairs and Maintenance to the Tax Depreciation rules*.

The issues paper reviewed the overall coherence of the tax depreciation framework with a focus on ensuring that the overall structure of the depreciation rules is as good as is practicable and that the detailed design of the rules can cope with the complex, real-world issues that arise. Among the issues considered were the competing investment biases created by inflation and depreciation loadings in favour of long-lived and short lived assets, respectively.

Chapter 5 of the issues paper considered the tax depreciation treatment of structures. A key constraint was the lack of New Zealand studies on economic depreciation of buildings and/or sufficiently robust New Zealand data for modelling depreciation on building.

In the absence of New Zealand data, a number of international studies were relied upon. The key international study relied upon was Hulten and Wykoff (1980)[1] which supports the view that buildings do depreciate.

Hulten and Wykoff estimated diminishing value rates of depreciation for various building types, excluding rental housing of: 2.02 percent for retail stores, 2.47 percent for offices, 2.73 percent for warehouses and 3.61 percent for factories.

A paper by Fraumeni (1997)[2] is also referenced. It indicated that the United States Bureau of Economic Analysis had estimated economic depreciation rates of 3.14 percent (based on a 31-year economic life) for industrial buildings and 2.47 percent (based on a 36-year economic life) for office buildings.

Other international studies considered in the issues paper were a study by Deloitte and Touche (2000)[3], which estimated economic depreciation rates of between 2.10 and 4.48 percent for different classes of building and a survey of various studies on economic depreciation for buildings by Gravelle (2000)[4], which concluded that buildings probably depreciate at rates in excess of 2 percent, but probably less than 4 percent.

In summary, none of the international studies quoted in the issues paper found that buildings (particularly non-residential structures) do not depreciate.

Officials' conclusion (in Chapter 9 of the issues paper), expressed in the context of removing depreciation on residential rental housing, was that depreciation for buildings should not be removed:

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[1] *The Measurement of Economic Depreciation Using Vintage Asset Prices: An application of the Box-Cox Power Transformation,* Hulten, Charles R. and Franck C. Wykoff, Journal of Econometrics 15 No. 8 (April 1981).

[2] *The measure of depreciation in the US national income and production accounts,* Bardara M. Fraumeni, Survey of Current Business, July 1997.

[3] Deloitte and Touche, *Analysis of the Economic and Tax Depreciation of Structures*, Washington DC, June 2000.

[4] *Depreciation and the Taxation of Real Estate,* Gravelle, J. CRS Report to Congress (October 2000).

Officials do not support the option of denying depreciation deductions for rental housing altogether, as such a measure raises a number of concerns. Property prices are typically made up of land and improvements (the asset – house – on that land and any improvements to that asset or the land itself). Denying depreciation deductions entirely might be suggested because properties often appreciate rather than depreciate, although depreciation deductions are aimed at reflecting changes in the value of improvements over time. If the overall value of a property does not change but improvements depreciate while land appreciates, failure to allow for depreciation deductions will discourage economically efficient investment in new improvements. Buildings are scrapped on occasion, and it is clear that at least these buildings have fully depreciated. ***The evidence presented in chapter 5 provides a rationale for some reduction to building depreciation rates but not for denying depreciation deductions altogether.*** [Our emphasis added]

If the above analysis holds for rental housing, we believe it is no less applicable to non-residential buildings (it is arguably more applicable given the international evidence that commercial, retail and industrial buildings typically have higher rates of economic depreciation than residential property.)

We note that concerns that the tax depreciation rate for buildings was too high, based on the international economic literature survey at the time, resulted in the 2005 rate change, from 4% to 3% (on a DV basis) (and 3% to 2% on a straight-line basis). In our view, this should be the extent of any change to the depreciation regime for non-residential buildings.

We do not believe that there have been any developments since 2004 which rebut the international findings above on depreciation of buildings. (In the next section we provide some recent research which suggests that the building depreciation rate may in fact be too low in the case of commercial and industrial properties.)

One of the ways forward identified in the issues paper was:

"…using New Zealand data, if feasible, to test the reasonableness of depreciation rates. One option that is currently being explored is to use New Zealand valuation data on a sample of properties for which no consents for structural improvements have been given. This may be a way of finding how the value of improvements has changed over time without the data being biased as a result of structural improvements to existing properties."

Unfortunately, we note that the data issues that existed at the time of the 2004 review persist today – we discuss these constraints later on.

8 Other international evidence

In addition to the literature on economic depreciation rates for buildings identified in the 2004 issues paper, we have conducted a new search focusing on non-residential buildings. The results of our review are summarised below:

8.1 Patry, A. (2007) Economic Depreciation and Retirement of Canadian Assets: A Comprehensive Empirical Study. Statistics Canada.

Patry provides a comprehensive empirical study of the economic depreciation of a range of Canadian assets, including various types of non-residential buildings. Patry also provides a useful summary of the depreciation rate estimates from the literature (the rates for buildings are outlined in the table below)

Table 2.1.1 Depreciation rate estimates from the literature (%)

		Range	
Assets/Studies	**Rate**	**From**	**To**
Office Buildings			
Hulten and Wykoff (1981a, 1981b, 1996)	2.5		
Deloitte and Touche (2000)	3.5		
Baum and McElhinney (1997)		1.6	2.9
Tanguay (2005)	5.9		
Gellatly, Tanguay and Yan (2002)	7.6		
Gellatly, Tanguay and Yan (2007)	7.4		
Industrial Buildings			
Hulten and Wykoff (1981a, 1981b, 1996)	3.6		
Deloitte and Touche (2000)	2.1		
Tanguay (2005)	9.1		
Gellatly, Tanguay and Yan (2002)	13.0		
Gellatly, Tanguay and Yan (2007)	9.7		

Patry's empirical study of Canadian assets include a breakdown of 25 various types of commercial and institutional buildings, as well as 13 types of industrial buildings. The study estimates that the average ex-ante service life (similar to our estimated useful life concept) is around 32 years for buildings (however, more recently – between 1995 and 2001 – the average service life has fallen from nearly 36 years to 28 years).

The ranges of diminishing value depreciation rates for commercial buildings vary from 6.2% to 8.9% with major outliers being a 4.4% rate for religious buildings and 10.6% for post offices. The depreciation rate for industrial buildings vary in range from 7.0% to 12.6% with the major outliers being warehouses at 6.0%, mine buildings at 17.5% and bunkhouses/dormitories and camps estimated at 16.1%. (The full estimated results are available in Annex D of the Patry paper).

In summary, the average depreciation rate for office buildings is found to be 5.9%, with 6.4% for shopping centres and 9.9% for manufacturing plants – refer table below. The average depreciation rate for all non-residential buildings was found to be around 7.3%.

Table 6.1 Economic depreciation rates for major asset categories	Depreciation rate		
	Estimated	Updated	Official
Buildings			
Office Buildings	6.2	5.9	2.2
Manufacturing Plants	8.7	9.9	3.0
Shopping Centres, Plazas and Stores		6.4	2.4
Farm Buildings		8.3	2.5
Warehouses, Refrigerated Storage and Freight Terminals	6.3	6.0	2.5
Maintenance Garages, Workshops and Equipment Storage Facilities	6.8	6.8	3.0
Restaurants, Fast Food Outlets, Bars and Nightclubs		8.5	3.4
Hotels, Motels and Convention Centres		5.5	2.2
Indoor Recreational Buildings		6.3	2.5
Passenger Terminals - (such as air, boat, bus and rail)		6.0	2.8
Total 10 average (representing 87% of building capital stock)	7.1	7.2	2.5
Building average	7.1	7.3	2.6

Patry finds that depreciation rates for buildings are on average almost triple the official rates used by Statistics Canada and the United States Bureau of Economic Analysis, which are largely based on the Hulten and Wykoff results. The increases are across the board with office buildings and shopping centres depreciating at close to 6.0% per year and manufacturing facilities depreciating close to 10% (compared to 2% and 3%, respectively under the official rates).

Patry concludes that a valuation bias in older buildings caused by accumulated improvements may explain the lower economic depreciation rates in the existing literature, including Hulten and Wykoff. The model used to sample the data was similar to the other depreciation literature, including Hulten and Wykoff.

8.2 Baum, A. and McElhinney, A. (1997) The Causes and Effects of Depreciation in Office Buildings: a Ten Year Update

This paper compares a study undertaken in 1986 by the same authors and estimates depreciation rates in office buildings in Central London ten years later.

The 1986 study found that the average rate of rental depreciation of the 125 buildings in the study's sample set was 1.1% while capital value depreciation was 1.6%. The most significant and important determinant of depreciation in rental value was found to be the configuration of the building, followed by the internal specification and external appearance (i.e. obsolescence related factors). Physical deterioration was found to be the least important. For explaining depreciation in capital value, internal specification and external appearance were most important; deterioration was again least important.

In 1996, the average rental depreciation rate had increased to 2.2% with capital value depreciation increasing to 2.9%. The sample of 128 buildings included 82 buildings in the 1986 study. The highest period of depreciation in the 1996 study was found to be much earlier in the life of a building (ages 7 to 12) than in the 1986 study (ages 17 to 26 and 20 to 29 for rental and capital values, respectively).

The study concludes that building lives are getting shorter (falling from around 40-45 years in 1986 to around 25 years in 1996) with depreciation for older property lower than depreciation on new property because older properties are closer to the end of their building lives and therefore close to their site (i.e. land) values.

8.3 Gort, M., Greenwood J. and Rupert, P. (1999) Measuring the Rate of Technological Progress in Structures

The study analyses the degree of technical progress in structures; it notes that as each decade passes new technology enables advances to be made. The study uses price data to determine the impact of technological change on building rents, the hypothesis being that newer office buildings have new and improved technologies embodied in their structures and should therefore rent for more than old ones, when holding the general physical condition of the building constant (i.e. assuming buildings are continually kept in good repair).

The study concludes that the rate of structure-specific technological progress is about 1% per annum. Due to technological progress buildings eventually become obsolete and need to be replaced. Economic depreciation in the model is estimated at 6.6% (compared to 1.9% for physical depreciation).

8.4 Gellatly, G., Tanguay, M. and Yan, B. (2002) An Alternative Methodology for Estimating Economic Depreciation: New Results Using a Survival Model

This paper develops depreciation profiles and life assets for 8 different types of structures. Gellatly, Tanguay and Yan determine depreciation on office buildings at a rate of approximately 7.6% and industrial buildings at a rate of 13.0%.

It is noted that substantial reductions in economic value are apparent early in life for many of the sampled structures. This study differs from Hulten and Wykoff, in that the model has a component included which calculates the ‘survival ratio’ of assets. It therefore incorporates the issue of retired assets, previously addressed as a limitation of Hulten and Wykoff in the work by Gravelle.

8.5 Dixon, T., Crosby, N. and Law, V. (1999) A critical review of methodologies for measuring rental depreciation applied to UK commercial real estate

This paper provides an analytical review of the methodologies and results of a number of past depreciation studies, including Hulten and Wykoff . The paper provides a breakdown of

depreciation rates on buildings from the studies examined and show a range of 1.1 to 3.0% for office buildings and 0.52 to 3.3% for industrial buildings.

9 Summary of the additional international evidence

The additional evidence outlined above confirms the results of the international studies referenced in the 2004 officials' issues paper – namely that buildings, and specifically commercial and industrial buildings, do depreciate. Importantly, we have not come across any studies which suggest that buildings do not depreciate.

While there are differing ranges for depreciation rates (and estimated useful lives) for non-residential buildings, the studies indicate that the current 3% DV rate (and 2% straight-line) rate is broadly appropriate. The recent comprehensive Patry study suggests that depreciation rates for commercial and industrial buildings should be much higher. However, we note that the consensus appears to be around the (lower) Hulten and Wykoff estimates.

10 New Zealand evidence and issues

One of the key constraints identified in the officials' issues paper, which persists today is the lack of New Zealand data, or empirical analysis, on building depreciation rates.

A potential concern with relying solely on international evidence may be that depreciation profiles for buildings may differ by geographic location (e.g. office buildings in London versus central Auckland or Wellington). However, we do not believe that any geographical differences would be sufficient to justify tax depreciation being removed for New Zealand buildings.

This is because the factors underlying tenant (and owner-occupier) demand for non-residential buildings in New Zealand should be the same as in Australia, Canada, the United Kingdom, or the United States.

We provide some qualitative analysis of the New Zealand commercial property sector below, supporting the international evidence that non-residential buildings do depreciate. This is based on our discussions with various PCNZ members on factors impacting on the New Zealand commercial and industrial property sector.

10.1 Higher rates of redevelopment for commercial buildings

We note that a clearly observable phenomenon with commercial buildings in New Zealand is the high rates of redevelopment (or capital reinvestment) – note for example, how few office buildings in the Auckland and Wellington CBDs are older than 30 years, let alone ones which have not undergone any significant capital improvements to the building structure.

This suggests that the average useful life of a commercial building is likely to be significantly less than the 50 year economic life used to set tax depreciation rates (we note that a number of

international studies have found the average service life of buildings today to be lower than in, say, the 1980s).

More importantly it shows that non-residential buildings are regularly being demolished to make way for newer buildings, when the opportunity cost exceeds the market value of an existing building. This strongly supports the assertion that these buildings depreciate due to obsolescence factors.

10.2 Changes in preferences and technology impact on capital values

The impact of changes in tenants' preferences on building values can also be readily observed.

By way of example, we understand the New Zealand Government has recently introduced new "Green" (energy efficiency) requirements for office buildings leased by the various Government departments. Compliance with these requirements has required significant capital improvements by commercial landlords (including a majority of the LPTs) to a number of existing buildings. Similarly, the move away from individual offices to an open plan office environment has required reconfiguration of certain structures, to meet occupiers' needs. In the absence of these improvements, the expected return on these properties will fall significantly (in turn impacting on buildings' capital values).

Drivers of technical obsolescence, in the commercial property sector, include changes to building standards. For example, office buildings constructed in the 1980s will have had significant structural improvements to bring them up to compliance with earthquake standards. Where such improvements are not cost effective, the building would have been demolished and new earthquake standard compliant structures erected instead.

In our view, the above are very real examples of the economic depreciation of buildings.

10.3 Buildings move between different market segments

Buildings also move across different market segments over their economic life, depending on their condition and suitability for use. For example, an office building developed in the 1970s may have been prime real estate at the time. However, if unimproved (but nevertheless reasonably maintained) the same building in 2010 will typically be sub-prime property due to changes in technology and tenants' preferences. This lower status will be reflected in the much lower rental yields on the property compared to a newer, more technologically advanced, building.

This movement of buildings across different segments of the market, over time, means that the analysis of capital values in aggregate (using for example, Quotable Value or Government valuation data) is inappropriate. Instead, the analysis needs to be done on a building by building basis, which we note would be a prohibitive exercise not least of which because the valuation data available does not separate out the value of capital expenditure over the life of a building.

This makes any attempt to draw any conclusions from the changes in capital values inherently dangerous.

The PCNZ has discussed in depth with CBRE, the available valuation databases to undertake empirical testing of whether buildings depreciate. Unfortunately, the databases available (i.e. QV, Government valuations, and the PCNZ Property Index) omit a number of key variables necessary to undertake any meaningful analysis.

11 Impact if depreciation on non-residential buildings was removed

We provide below some analysis of the potential economic impact if tax depreciation on non-residential buildings is removed. We note that a more detailed report on the merits of the TWG's property tax proposals will be prepared by the New Zealand Institute of Economic Research.

11.1 Breakdown of the fiscal implications

Inland Revenue's estimate of the additional revenue that would be raised by denying depreciation deductions on buildings is $1.3 billion per annum. We understand that approximately 30% of this revenue estimate relates to denying depreciation on residential properties (i.e. rental housing investment in the tax base). 70%, or approximately $900 million, would be raised by denying depreciation deductions to owners of non-residential buildings, including members of the PCNZ. Applying a 30% tax rate, this suggests that annual depreciation deductions for non-residential buildings amount to approximately $3 billion.

We understand that the costing has been constructed using Statistics New Zealand capital stock data and fixed capital formation data for the 2008 year with various assumptions around the proportion of residential and non-residential buildings in the tax base (approximately 20% and 100%, respectively). The net capital stock of residential buildings in 2008, in current prices, was valued at approximately $267 billion, while non-residential buildings comprised approximately $110 billion.

We have not seen the detailed costing work, but would assume that the above estimate is likely to (perhaps significantly) overstate the additional revenue from denying depreciation on non-residential buildings. For example, we note that capital stock is valued in current prices, whereas the depreciation base is historical cost (it is unclear whether any adjustment has been made to capital stock to compensate). Also, the assumption that most, if not all, non-residential property is in the tax base discounts significant property holdings by non-taxpayers (including the charitable sector and local and central government).

If the revenue impact is unclear, there is a risk of policy decisions being made without the full costs and benefits being understood.

11.2 The impact will be felt predominantly by New Zealand businesses

The largest 4 LPTs in the New Zealand market, which can be used as a reasonable proxy for institutional investment in commercial property, hold approximately $4.1 billion (excluding land value), or around 3 to 4%, of the total stock of non-residential buildings[5]. In total, these taxpayers have annual depreciation deductions of around $65 to $70 million per annum. This comprises approximately 2% of the $3 billion gross depreciation deduction that would be disallowed under any depreciation change.

This leads us to conclude that the majority of the impact from removing depreciation on non-resident buildings will be felt by New Zealand businesses that own their premises. This will result in a real cash-flow cost to these businesses (which may or may not be compensated through other tax changes).

We understand that some business owners, particularly in the SME sector, own premises as a form of collateral to secure bank financing for their operations. The loss of tax depreciation could raise the cost of capital to such firms (to the extent the tax benefit of depreciation deductions reduce their net financing costs) or reduce availability of credit.

It also possible that removing a tax deduction in one area will simply refocus attention on other areas (e.g. the interest deductibility rules). To the extent gearing can be increased, the same after tax return profile may be able to be achieved. This would not be desirable from an economic perspective.

11.3 Impact on cost of, and investment in, commercial property infrastructure

Removing depreciation on non-residential buildings will either reduce re-investment in this sector or increase rents for occupiers.

Office buildings, manufacturing plant, warehousing, etc, are all part of the infrastructure of New Zealand Inc. Reduced investment in this infrastructure or a higher cost associated with its use will adversely impact on the competitiveness of New Zealand business.

12 Tax depreciation treatment in other jurisdictions

The appendix to this report compares the tax depreciation treatment of buildings in a number of other countries – based on a survey of KPMG's international network of member firms on depreciation and other land taxes. We note that, as a general rule, non-residential buildings receive some depreciation tax benefits (either as an explicit tax depreciation deduction or by way of capital allowances).

[5] Kiwi Income Property Trust, Goodman Property Trust, AMP NZ Office Trust, ING Property Trust, based on First NZ Capital data.

In particular, we note that the majority of our trading partners, including Australia, Germany, Japan and the United States allow depreciation of (some or all) non-residential buildings.

The United Kingdom currently allows depreciation in respect of industrial buildings (called an industrial building allowance); however this is to be abolished from 2011.

Removing tax depreciation for non-residential buildings would make New Zealand an outlier from a global taxation perspective. At a time when countries are increasingly competing for internationally mobile capital, the New Zealand tax system needs to provide the right incentives for business to stay in New Zealand and relocate here. Removing tax depreciation, when there is clear international evidence that buildings do depreciate, would be contrary to this objective.

13 Pressure on capital/revenue boundary

The boundary for what is a capital expense and repairs and maintenance will need to be addressed.

While an ongoing issue, currently, if maintenance expenditure (which should be deductible under ordinary principles) is not immediately expensed because it is classified as capital expenditure for tax purposes, it can nevertheless be claimed under the depreciation rules.

If depreciation is removed, these amounts will be permanently non-deductible putting significant pressure on the boundary between what is, and is not, repairs and maintenance of a building. For the commercial property sector this is significant given the substantial sums that are spent on refurbishment and maintenance.

14 Conclusion

The findings of the 2004 officials' issues paper, and other international research on the tax depreciation of buildings, strongly suggest that buildings do depreciate. This is also supported by various anecdotal evidence on the need to replace and improve buildings. Further we have not found any studies which suggest buildings do not depreciate.

We recognise that the Government is constrained fiscally, and any changes to the tax system will need to be self-funding. Removing depreciation on buildings would seem to be an easy (or at least an easier) option, to fund changes to tax rates.

We do not dispute the need for reform of the tax system to address the various anomalies in the tax system (including rental housing, if there is a tax bias there). As far as we are aware, tax depreciation on non-residential buildings was not an area of concern for the TWG.

There needs to be a compelling reason for change. Removing depreciation on buildings simply to fund other changes in the tax system, when there is considerable evidence that buildings do economically depreciate, is not such a reason.

15 Disclaimers

This report has been drafted specifically in response to a request by PCNZ for advice on the TWG's tax depreciation recommendation. Accordingly, neither KPMG nor any member or employee of the firm undertakes responsibility in any way whatsoever to any person, other than PCNZ, for any errors or omissions in the report, however caused.

The analysis contained in this report includes information provided by PCNZ members, and other third parties, to KPMG. Neither KPMG nor any member or employee of the firm undertakes responsibility in any way whatsoever to any person for any errors or omissions in third party information provided to us.

16 Appendix – Summary of responses from KPMG's global member firms (Depreciation and Land Tax Rules)

	Ireland	Singapore	United Kingdom	Japan	Germany	Hong Kong	The Netherlands	Malaysia	Thailand	United States	Australia
1. Does your jurisdiction allow depreciation on non-residential buildings to be claimed for taxation purposes and, if so, are there special rules for depreciating structures?	Industrial buildings which are used for qualifying manufacturing activities can claim tax depreciation at a rate of 4% p.a. straight-line.	No. Tax depreciation is only allowed for industrial buildings that are used for qualifying activities (e.g. mill, factory, manufacturing, processing, warehousing, etc – this list is defined in the Income Tax Act). Such tax depreciation is known as industrial building allowance or IBA in short.	No. Previously, tax relief was available in respect of expenditure on industrial buildings (know as industrial buildings allowance) but this is now being phased out and will be shortly abolished with effect from 6th April 2011.	Yes, buildings are depreciated on a straight line basis.	Yes, generally, 3% (in case of a building application till 31 March 1985: 4%) or the effective time of usage or declining-balance method (exception for some old cases)	Tax allowances in respect of non-residential buildings and/ or structures located in Hong Kong are available under the profits tax regime, but not the property tax regime.	The general rule for calculating the annual depreciation for tax purposes is to take the historical cost price minus the rest value divided by the lifespan of the building. It is not allowed to depreciate on land. As of 1 January 2007, based on Dutch tax law, limited depreciation rules apply on buildings. The limitation entails that depreciation may be taken up to a certain value. For investment properties (such as residential, office and commercial real estate), this minimum depreciation value equals the value established by the municipality under the Valuation of Immovable Property Act ("WOZ"), whereas for properties used as part of one's own business (business premises), it will equal half the value under the WOZ. It is also possible to depreciate building s to their lower value in use. It is also possible to depreciate investments in tenancy rights.	In Malaysia, depreciation on buildings is generally not allowable for tax purposes. However industrial building allowances (i.e. a form of tax depreciation) may be claimed on the cost of a building which qualifies as an 'industrial building'. Examples of these include, amongst others, a factory/warehouse associated with a manufacturing activity, and by extension hospitals, hotels, buildings used for research, welfare or living accommodation for workers. Note however that the Minister of Finance is empowered to prescribe a building as an 'industrial building' which will qualify for industrial building allowances and to determine the rate of the allowance as well. In general commercial or residential buildings would not qualify as 'industrial buildings'.	Yes - In general, buildings (except temporary/non-durable buildings) are depreciated at the rate of not more than 5% of the acquisition cost for corporate income tax purposes. There are no special rules for depreciating buildings.	Non-residential buildings are depreciated on a straight-line basis over 39 years. IRC Section 168(b)(3)(A) Depreciation on most other types of depreciable property is claimed on a double (or in some cases 150%) declining balance method, switching to the straight line method only in the year in which the straight line method will yield a larger deduction. IRC Section 168(b)(1)	Yes – Australia's income tax rules allow depreciation on both residential and non-residential buildings and structural improvements (referred to as "capital works"). Broadly, the following requirements must be satisfied in order to be eligible: • the capital works must be used in a deductible way (i.e. used to produce assessable income or carry on R&D activities); • the general rule is the legal owner of the capital works is entitled to depreciate (although if the costs are incurred by a lessee, the deduction will be available to the lessee); • the deductions are not available for taxpayers who hold the capital works as trading stock; • the deductions are not available until the construction of the capital works is complete. The quantum of deductions is based on actual cost (rather than purchase price) and, upon sale, a previous owner is required to provide details regarding capital works to the new owner. Various rules regarding what type of capital expenditure qualify for eligible expenditure. The rates are outlined at Q4.
2. Does your jurisdiction allow depreciation on residential rental properties?	Generally no. We had special incentives which are now being phased out which provide for tax relief on residential property that was located in certain areas	No.	No.	Yes.	For buildings used for accommodation (residential rental property), the annual straight-line depreciation rate is 2% (for buildings constructed before 1 January 1925: 2.5%) or effective time of usage. The alternative declining-balance method rates are according to the current tax law: - first 10 years: 4.00% - following 8 years: 2.50% - remaining 32 years: 1.25% The declining-balance method of depreciation is no longer available for buildings used for accommodation if the building was acquired or constructed after 1 January 2006.	Residential rental properties in Hong Kong should qualify for commercial building allowances for profits tax purposes. No tax allowance, however, is available for property tax purposes.		No.	If the residential properties are rented out as part of the company's business, then it should be allowed a deduction for depreciation at the general rate for buildings (6% of the cost value) for the purpose of corporate tax calculations. However, depreciation deductions on residential property for personal use/non-business purpose is not permitted.	Yes, residential rental properties are depreciated on a straight line basis over 27.5 years. IRC Section 168(b)(3)(B)	
3. Is there any restriction on offsetting losses from residential property against other types of taxable income?	Rental losses can only be offset against rental income. They cannot be offset against any other type of income.	Losses from residential property are generally confined to being set-off against income from residential properties. However if the taxpayer is in the trade of renting both commercial and residential properties, the losses from residential property may be set off against gains from commercial properties	For an individual letting property as part of a property business, losses cannot generally be set off against general income. Limited relief is available if the loss includes a capital allowances claim. Capital allowances cannot be claimed, however, in respect of residential property, so the point would not arise.	There are baskets that segregate types of income for individual tax purposes. However, generally residential losses can be offset against salary and wages income. For corporations there are no baskets and everything is essentially taxed at the full corporate rate of approximately 42%.	Yes, there are restrictions concerning the usage of tax losses in case of special tax models ("Steuerstundungsmodelle"), see Section 15b ITL. Besides this special regulation, the general rules are applicable including minimum taxation pursuant to Section 10d ITL, which is applicable for Corporate Income Tax purposes and Trade Tax purposes, too.	For profits tax purposes, rental losses arising from residential (and non-residential) property can be offset against other types of taxable income of that taxpayer. However, if a special purpose company is incorporated to hold the property, any income/ loss of that special purpose company cannot be offset against the income/ loss of any other group entities (i.e. there is no group relief available). Losses can be carried forward indefinitely for offset against future assessable profits, but cannot be carried back.	There is no restriction in offsetting losses from investments in residential property against other types of taxable income. Losses can in principle be offset against the profit of the previous year as well as the nine following years. In 2009 and 2010 a prolonged carry back facility has been introduced from one to three years. If this facility is used, the carry forward period will be decreased to six years.	Generally, losses from residential property would not be available to be set off against other types of taxable income unless viewed as losses arising from a business source (in limited circumstances)	Deduction for depreciation of residential property used for business purposes is limited up to the amount of taxable income in that period (loss carry forward for 5 years).	Yes, with respect to individuals, estates, trusts, personal services corporations and certain closely held corporation. The passive activity loss rules under IRC Section 469 limit such a taxpayer's ability to offset other types of income with net passive losses. Any excess loss is carried forward to the following year or years until used, or until deducted in the year such a taxpayer disposes of its entire interest in the activity in a fully taxable transaction Rental real estate is generally considered a passive activity, giving rise to passive income or passive loss, with few exceptions. An individual who actively participates in the rental business may deduct up to $25,000 of rental loss against other income, even though the loss is passive. This deduction is phased out as the individual's income rises and is subject to various other limitations.	No - there are currently no restrictions in place. In the past, there has been various speculation as to whether the 'negative gearing' benefit associated with rental properties should be abolished again (having been abolished briefly in the 1980s and then reinstated shortly thereafter in response to significant political backlash
4. Are there different tax depreciation rates depending on building type and/or use (e.g. different rates for office buildings, factories, warehouses etc.) and, if so , what are the broad categories and rates?	As noted above, industrial buildings qualify at a straight-line rate of 4% p.a. unless the office/warehouse is less than 10% of the total sq footage attributed to the industrial building no tax depreciation is available. In certain circumstances, other types may qualify and for ease, I attach a copy of the Revenue publication on this. Please note that a lot of these incentive allowances are being phased out.	If the building qualifies for IBA, the taxpayer may claim an initial allowance of 25% of the capital expenditure incurred in the year and an annual allowance of 3% over until the expenditure is written off.	No depreciation is available.	I will follow up but yes. It doesn't actually differentiate on the use but rather construction method etc. For example concrete steel construction is about 40 years. I will follow up with some details on Monday.	See answer to (2) above . According to the official publication of the German fiscal authorities, there exist special depreciation rates for immovable assets (other than buildings), for example: warehouse = 16 years light-metal-designed halls = 14 years silo = 17 - 33 years	Buildings or structures are broadly classified into "industrial buildings or structures' and "commercial buildings or structures", based on their usage. Generally, industrial buildings or structures qualify for an initial allowance of 20% and annual allowances of 4% over 20 years. On the other hand, commercial buildings and structures qualify for an annual allowance of 4% on a straight-line basis, but no initial allowance	There is no fixed depreciation rate applicable. This is decided by a case to case approach and is depending on the type of real state, state of maintenance, etc. Generally speaking, the annual depreciation rate is between the 0% and 4%	With regards to industrial building allowances, the rate of initial allowance (broadly given in the year of purchase) is generally 10% of qualifying expenditure and the rate of annual allowance is generally 3%. An initial allowance is claimed in the year the capital expenditure is incurred and the annual allowance is claimed annually until the tax written-down value (TWDV) (which is equal to the cost of the asset less allowances claimed) is nil or the asset is disposed of. Note however that certain specific categories of industrial buildings qualify for increased allowances. Examples of such industrial buildings include, amongst others, a warehouse used solely for the purpose of storage of goods for export/imported goods which are to be processed and distributed/re-exported, buildings used as schools/educational institutions, buildings used for the provision of living accomodation for individuals employed in the business and etc.	There are special rates for factory buildings owned by companies whose fixed assets (excluding land) do not exceed THB 2 million and employs not more than 200 workers to have an initial deduction of 25% of the acquisition cost, with the remaining cost value deducted in accordance with the general rate (i.e., 6%).	Not generally. However, certain specified types of real estate may be depreciated more quickly. It is difficult to categorize these exceptions into broad categories or rates. For example, single purpose agricultural or horticultural buildings are depreciated over 10 years, retail motor fuel outlets are depreciated over 15 years, and gas pipelines are generally depreciated over either 7 or 15 years, depending on when placed in service and where located. Other special purpose structures may be depreciated at different rates. IRC Section 168(e)(3) We can provide a more detailed list if requested. Depreciation on such buildings is generally claimed using the double-declining (or 150%) balance method, switching to the straight line method only in the year in which the straight line method will yield a larger deduction. IRC Section 168(b)(1)	***Refer to summary table***
5. How are tax depreciation rates set (e.g. has the tax authority undertaken studies of depreciation rates for buildings, or are rates set by reference to international evidence on building rates or rates for accounting?	They are set out in legislation on the above basis.	***(Answer N/A)***	N/A	The underlying principle is useful life. The rates set for tax are an attempt to estimate the useful life of the building. Hence, for example wooden structures have a much shorter depreciation life than steel and concrete. Whether that is actually correct from a life perspective may be debateable but that is the underlying philosophy. In the case of listed REITs for example they seek to limit depreciation so that they can increase the amount of accounting income. In such a case they typically try and get engineering reports to show that the life is say 50 years and depreciate over the longer of the default tax life or the life detailed in the engineering report. In that case tax would use the longer rate. It is possible for tax to use longer rates as it is increasing taxable income but the limiting factor is accounting.	According to our understanding, the tax depreciation rates, set by the German fiscal authorities, are based on experiences during the tax audit of the German fiscal authorities.	As the tax allowances for industrial/ commercial buildings or structures have been in place for many years, we are unable to locate the consultation papers, if any, in respect of the determination of the rates of allowances.		It is envisaged that further research would be necessary in order to ascertain the basis by which the tax depreciation rates are set by the tax authority.	No information - requires further research	The depreciation rates, when enacted, were generally intended to match useful life. The Department of the Treasury is charged, under IRC section 168(i)(1) with monitoring and analyzing actual experience with respect to all depreciable assets. We are not, however, aware of the results of such monitoring or analysis (if it has been conducted). We could conduct additional research on this point if requested.	The rates are legislated in Australia's Income Tax Assessment Act.
6. Are there rules for recovery of tax depreciation when a building is sold for more that it's depreciated book value?	There is a clawback of the tax depreciation claimed up to the original cost of the building and this is taxed at the trading rate (generally 12.5%). Where there is a gain in excess of the cost of the building, this is taxed at a rate of 25%. New rules have been recently introduced to tax windfall gains at 80% that arise as a result of rezoning but I can send you something on this separately if required	When a building is sold, a clawback of the allowances claimed will be made	N/A	The depreciated value becomes the basis for determining the gain on sale.	There are no special rules for a recovery of tax depreciation for Corporate and Trade Tax purposes. However, in case of a sale of immovable property that is not used for business purposes, the tax depreciation, deducted in the past, increases the capital gain on the level of the individual for German Income purposes, see Section 23 ITL.	If the sales proceeds arising on the disposal of an industrial/ commercial building or structure exceed the tax written down value of the property, the excess amount (limited to the total allowances claimed in prior years) will be clawed back and treated as taxable in the year of disposal.	If a building is sold for more than its book value, the profit will be taxable against a CIT rate of 25.5%. It is however, under circumstances, possible to form a reinvestment reserve. In general the reserve needs to be used with the next three years and needs to be used for the purchase of real estate which has the same economic use as the sold real estate.	For Malaysian tax purposes, the disposal of a building (for which industrial building allowances have been claimed) to a third party would trigger balancing adjustments depending on the TWDV of the asset and the disposal price/market value, whichever is higher. A balancing allowance arises when the market value or the sale price of the asset exceeds the assets TWDV. A balancing charge arises when the market value or sale price of the asset exceeds the assets TWDV. However the amount of the balancing charge to be imposed will be limited to the amount of allowances claimed on the asset prior to disposal. Any gain that is in excess of original cost may attract Real Property Gains Tax where the period of ownership is less than 5 years.	Depreciation recapture (the difference between book value of asset and sale price) treated as taxable income for corporate tax purposes (no separate tax on capital gains).	Not generally with respect to many buildings. IRC Section 1250. Note, however, that with respect to individual taxpayers, IRC Section 1(h)(1)(D), taxes any gain realized (the amount realized in excess of the depreciated basis) at a rate 10% higher than the normal long term capital gains rate of 15%. This additional tax may be thought of as a proxy for recapture. Corporations are subject to the same tax rate on capital gains and ordinary income so the entire gain (amount realized in excess of the depreciated basis) will be taxed at the same rate. In addition, for all taxpayers, any depreciation claimed in excess of the straight line method is recaptured and taxed as ordinary income. Such excess depreciation may be claimed in the case of buildings with a useful life (depreciation period) of less than 27.5 years and in some other cases.	The disposal of buildings which have been depreciated by an owner will trigger a capital gains tax ("CGT") event. Broadly, for buildings acquired post 13 May 1997, the building depreciation claimed by the owner will reduce the CGT cost base of the building, thereby increasing the amount of taxable capital gain to effectively recapture building amortisation. There are no such adjustments for buildings acquired pre 13 May 1997.

7. Does your jurisdiction have a land tax (being an annual tax levied on the value of land)?	At present we don't have a land tax though rates are paid annually to the local county council.	There's property tax in Singapore. This tax is on all immovable properties in Singapore (land and buildings). Its currently at 10% of the annual value of the property. The annual value is the average annual rent that the property can fetch in the market.	Local business rates are payable by the occupiers of commercial property (and council tax in respect of residential properties)	Yes but they also levy one on the building portion. Every land and building (and apartment) in Japan has what we call a fixed assets tax assessment value. This is the basis for the charge. For land is not necessarily a reflection of the market price as it is done using a benchmark piece of land (which is valued) and adjustments are made based on a prescribed formula. In most cases it will be less than the actual value (for land). For buildings the value is based on the materials used and a rule of thumb is that the value is 70-80% of what it cost to build. This can be a real problem where you have something where the builder went overboard and you buy cheap because the assessment value does not change just because the asset is sold at a price significantly lower than its assessment value. One other thing that is useful to keep in mind in the context of Japan is that buildings (particularly residential but also true of office and other asset classes) have typically not been made to last. This is changing now but when you buy residential there is in fact a significant discount in most cases for older buildingsIn fact for residential houses the building is often not assigned any value where it is older and people just look at land value. Office too has tended to age very significantly in Japan. In that context it is very different from New Zealand (which I am assuming is like Australia) in that older houses in Japan are typically assigned no value. There are obviously exceptions where for example the building has some historical value but most of the home builders have not built things to last like they do in New Zealand. One of the reasons for this is to keep things turning over and the other is that they tend to spend a lot more money on gadgets in the home than western countries and the gadgets tend to age. The other is simply that the house is more integrated with the various attachments (rather than being more of a shell the inside of which can be updated).	Yes.	There is no land tax in Hong Kong. However, rates are charged at a percentage (currently 5%) of the rateable value and, for properties in the certain regions of Hong Kong with Government leases granted on or after 27 May 1985, Government rent calculated at 3% of the rateable value of the properties is also payable. The rates for the first two quarters of the 2009/10 financial year (i.e. the quarters ended 30 June and 30 September 2009) have been waived, subject to a ceiling of HK$1,500 per quarter.	Based on Dutch tax law, land tax does not exist. There is however a property tax, based on the above mentioned WOZ value which is annually established by each municipality.	In Malaysia there is property tax in the form of assessment rates and quit rent which are levied at varying rates. The amount of assessment tax and classification of properties varies from one local authority to another and the basis for calculating assessment tax may also differ from state to state. The amount of quit rent also varies from state to state.	Yes - a House and Land tax is levied at the rate of 12.5% of the assessed rental value of the property. There are also land transfer fees/tax on the transfer of immovable property	In the United States, property tax on real estate (an annual tax levied on the value of real estate, including land and buildings) is levied by local government, usually at the municipal or county level. The federal and state governments do not levy property tax.	Yes – each Australian State and the Australian Capital Territory imposes annual land tax, payable on the unimproved value of land at certain dates. The rates vary from jurisdiction to jurisdiction.