INQUIRY INTO PROPERTY TAX (FIRST HOME BUYER CHOICE) BILL 2022

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Submission to the Portfolio Committee No. 1 – Premier and Finance

Inquiry into the Property Tax (First Home Buyer Choice) Bill 2022

NSW Treasury



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1. Introduction

NSW Treasury welcomes the opportunity to make a submission to the Portfolio Committee No.1 – Premier and Finance in relation to its *Inquiry into the Property Tax (First Home Buyer Choice) Bill 2022* (the Inquiry) referred by the Legislative Council on 18 October 2022.

In the 2022-23 Budget, the NSW Government announced the First Home Buyer Choice, providing eligible first home buyers a choice between paying upfront stamp duty or an annual property tax. The *Property Tax (First Home Buyer Choice) Bill 2022* (the Bill) establishes the legislative framework under which first home buyers can choose to pay an annual property tax instead of stamp duty.

This submission provides background information on the First Home Buyer Choice. It explains particular aspects of the policy and discusses the economic effects of the scheme.

2. Background

2.1 Rates of home ownership are falling

First home buyers are taking longer than ever to save for their first home due to high property prices. The overall rate of home ownership in New South Wales has fallen from 70 per cent in the 1990s to 64 per cent in 2021. For younger people aged 25 to 34, the national rate of home ownership looks much worse at around 41 per cent in 2019-20. First home buyers are becoming homeowners later in life or are not able to own their home.

2.2 Consultation on property tax reform

In the 2020-21 Budget, the NSW Government announced that it would consult on a proposal to tackle the inefficiencies of the property tax system, to reduce barriers to home ownership and boost long-term economic growth.

In November 2020, the Government began its formal consultation with the release of its Consultation Paper, which outlined the benefits of the change, and proposed the broad policy framework of a property tax. In June 2021, the Government released a Progress Paper, providing a further layer of policy detail and updating key elements of the proposal following the first round of consultation.

During the course of these consultation rounds, the Government received 71 formal submissions from industry that were not subject to confidentiality, and over 250 community submissions following a multi-channel consultation process. This enabled the participation of a wide cross-section of society; from individuals, businesses and organisations interested in shaping the future of a property tax system. Consultation meetings were held with over 110 organisations, and 10 webinars and fora were conducted in partnership with industry organisations. The NSW Government's 'Have Your Say' community-focused website provided a 'front door' for welcoming community views. The website attracted more than 23,800 visits, 6,152 responses to the quick poll, and 3,544 survey completions.

The consultation process found widespread support for the proposition that NSW should move away from the existing property tax system based on stamp duty. The Property Tax Proposal also resonated strongly with first home buyers as the upfront costs of buying a home are particularly constraining as it can take many years to save the necessary amount.



Informed by two years of community feedback, consultation and research, the Government has chosen to focus the policy on first home buyers, including First Home Buyer Choice as part of a broader housing package announced in the 2022-23 Budget.

The Government's final decision builds on the ideas developed in the consultation process, such as the idea of a choice between an annual property tax and stamp duty, different property tax rates for owner-occupied and investment properties, indexation in line with average incomes, and a deferral scheme for households unable to meet property tax payments.

2.3 The 2022-23 Budget

In the 2022-23 Budget, the Government announced First Home Buyer Choice as part of a \$2.8 billion package of measures intended to address both housing affordability and home ownership.

In this submission housing affordability is taken to refer to the level of home prices, while home ownership refers to the share of the housing stock that is owner-occupied. As a broad simplification, measures that address the supply of homes are likely to have the greatest effects on prices and affordability, while tax reforms can be constructed to increase home ownership by changing the relative prices faced by owner-occupiers and investors.

The Government's housing package includes the First Home Buyer Choice and a Shared Equity Scheme to address home ownership, and a range of supply-side elements to address housing affordability.

The expected effects of First Home Buyer Choice are discussed in more detail below. The removal of stamp duty for eligible first home buyers, and its replacement with an annual property tax is not expected to have any noticeable effect on home prices, but it is expected to increase home ownership. Home ownership will increase because the removal of stamp duty lowers the deposit barrier for first home buyers, and because the property tax rates favour owner-occupiers over investors.

The NSW Shared Equity Scheme trial is designed to make home ownership more achievable for single parents, older singles and first home buyer key workers. The NSW Government's equity contribution is up to 30 per cent of the purchase price of an existing dwelling and up to 40 per cent of the purchase price of a new dwelling. Eligibility for the scheme will be subject to a gross income threshold of \$90,000 for singles and \$120,000 for couples in a household. This scheme is expected to assist households who may not otherwise be able to achieve home ownership.

The major supply-side measures announced as part of the 2022-23 Budget include:

- *Accelerated infrastructure* \$300 million to co-fund and accelerate the delivery of 'shovelready' infrastructure projects that will enable new homes in Sydney and key regional areas
- *Planning system* \$162 million to boost the supply of dwellings through faster assessment times, strategic planning and targeted rezoning.
- Social housing \$300 million to upgrade more than 15,800 social homes to improve the quality and extend the life of properties and ensure they are suitable for ageing and less mobile residents
- *Regional housing* \$174 million to deliver around 270 new and refurbished homes for key workers like teachers and police in regional and remote communities. This is in addition to the \$75 million previously announced for health worker housing
- *First Nation housing* \$150 million to build 200 new and 260 upgraded homes for First Nation families, and install 4,440 climate resilience and energy saving upgrades, helping to reduce overcrowding and improve quality of life for tenants in order to Close the Gap.



3. Features of First Home Buyer Choice

The Terms of Reference for the Inquiry direct the Committee's attention to the provisions of the Bill. NSW Treasury provides the information below to assist the Inquiry.

3.1 Choice is the key feature of the scheme

The First Home Buyer Choice is all about an individual's circumstances and the choice that is best for them. For many people, choosing the property tax will almost always result in a lifetime saving compared to stamp duty, and it would always lower the up-front cost of a home. For those who never intend to move out of their home, stamp duty may be the best option.

To assist first home buyers in making the choice, a First Home Buyer Choice Calculator has been made available online. The calculator estimates the property tax payable in the first year of ownership of a specific property and compares it with the stamp duty payable at purchase. The calculator makes clear that the property tax will be an annual payment, and that its growth will be subject to indexation of the tax rates.

For properties costing between \$800,000 and \$1.5 million, the present value of owner-occupier property tax payments over twenty years will usually be less than the stamp duty payable at purchase (for typical land to market value ratios of up to 60 per cent, and under reasonable assumptions about the indexation of tax rates and the applicable discount rate). There will, however, be some examples where different assumptions may apply, and in all cases purchasers will need to make their own calculations for the property they are considering buying.

Half of all owner-occupiers sell within 10.5 years, and about two-thirds of owner-occupiers sell their properties within 20 years (see Appendix B). Treasury does not have specific data on the holding periods of first home buyers but expects that they will be shorter than the holding period of the average owner-occupier. First home buyers tend to be younger and buy less valuable properties as first steps in the property market. Taking account of typical holding periods, it is expected that about two-thirds of first home buyers in the \$800,000 to \$1.5 million price range will choose the property tax.

For properties between \$650,000 and \$800,000, stamp duty concessions are available, which makes the property tax option relatively less attractive. Nevertheless, significant amounts of stamp duty can still be payable in this price range, and for people intending to hold a dwelling for a relatively short period, the property tax can still result in lower tax overall. Treasury expects about 20 per cent of first home buyer purchasers in this price range will choose the property tax.

For properties below \$650,000, first home buyers are exempt from stamp duty, and these buyers are not expected to choose the property tax.

Even if the present value of expected property tax is higher than the relevant stamp duty amount, some first home buyers will choose the property tax option because it helps them to get into the property market sooner. Stamp duty on a \$1.5 million property is \$66,700. For a first home buyer who does not have this up-front amount as savings, the property tax provides an option to purchase their dream home.

First Home Buyer Choice will allow people to choose the tax arrangements that work best for their own personal situations.



3.2 Eligibility criteria

The First Home Buyer Choice will be available for dwellings costing up to \$1.5 million. For the purchase of vacant land, intended for the construction of a first home, the price cap will be \$800,000.

First home buyers must satisfy the current First Home Buyers Assistance Scheme (FHBAS) eligibility rules for stamp duty concessions to access the First Home Buyer Choice scheme. These rules require the purchaser to move into the home within 12 months after buying the property and live there for a continuous period of at least six months. Primary production land will not be an eligible property for property tax.

After a first home buyer who opted into property tax sells their home, the property tax status would not be retained. Purchasers who are not first home buyers would not have the option of paying property tax and would have to pay stamp duty.

Existing transfer duty concessions for first home buyers would be maintained. First home buyers purchasing a home for a price below \$650,000 (and \$350,000 for vacant land) would remain exempt from duty, while first home buyers buying a property between \$650,000 and \$800,000 (and \$350,000 to \$450,000 for vacant land) would retain access to concessional duty rates.

3.3 Rates of property tax

The property tax rates are designed to support higher rates of home ownership. Until June 2024, the property tax rates will be:

- Owner-occupier: \$400 plus 0.3 per cent of land value, and
- Investor: \$1,500 plus 1.1 per cent of land value.

From July 2024, these rates will be adjusted by indexation rules, discussed below.

Although the first home buyer eligibility rules require the purchaser to move into the home within 12 months and to occupy it for at least 6 months, first home buyers will still have the option of renting out their property. If they choose to do this, they will be subject to the investor rate of property tax.

The higher tax rate provided for investors reflects the Government's focus on home ownership.

- For investors, the property tax will be deductible for income tax purposes, like council rates and land tax. If a higher tax rate were not provided for investment properties, investors would face a lower effective tax rate than owner-occupiers.
- At present, around 30 per cent of people receiving first home buyer duty concessions rent their properties out within 12 months of purchase. The revenue forgone in these cases represents tax concessions for a class of property investors, which does not support the Government's goal of increasing home ownership (i.e. the owner-occupied share of the housing stock).
- In the case of property tax, the higher investor rates will mean that the stamp duty forgone is concentrated among those who intend to owner-occupy the property they purchase.

Treasury does not expect that the higher investor rates of property tax will affect market rents. Rents are largely determined by tenants' incomes, and the balance between supply and demand for dwellings in different parts of the State. The property tax, including the investor rate component, will not change tenants' incomes or the overall balance between supply and demand for housing services.



As home ownership increases, the reform will also reduce the number of households that are seeking to rent. The reduction in the supply of rental homes associated with higher home ownership will be matched by a reduction in the demand for rental homes, with no effect on market rents.

3.4 Indexation of property tax rates

For 2024-25 and subsequent financial years, the tax rates will be indexed each year. The indexation rules for tax rates will ensure that the average indexed property tax payment will grow in line with average annual incomes, ensuring that property tax payments remain affordable over time. By itself, the indexation approach would substantially reduce the volatility of individual property tax payments compared with a system involving a constant tax rate applied to land values. As an added protection, the year-to-year growth of property tax payments is capped at a maximum of 4 per cent growth.

Nominal Gross State Product (GSP) per capita has been chosen as the index factor for two reasons. The growth of GSP per capita provides a measure of average income growth, recognising that households derive income from a variety of sources, not just wages. Nominal GSP per capita is also a relatively stable and predictable series; it captures the effects of inflation and real income growth, as well as shifts in the share of wage and non-wage income.

While property tax revenue will grow over time as more properties are opted in, eventually the revenue will stabilise. Once stabilised, total revenue will grow at a rate equal to GSP (assuming that the number of properties grows in line with population growth). Stability of revenue as a share of the economy is a desirable tax feature, lessening the need to change tax rates.

In recent decades, the average rate of NSW residential land value growth has exceeded and been more volatile than average income growth. In the 15 years from 2007 to 2021, the average annual growth of average residential land value was around 6.4 per cent. Maximum and minimum annual growth of land values during this period varied between 24.8 per cent and -7.8 per cent (see Chart 1 below). This compares with 3.2 per cent average annual growth of nominal GSP per capita over the same period, with a maximum annual growth of 5.7 per cent (in 2011) and a minimum of -1.3 per cent (in 2020).



Chart 1: Average residential land value in NSW vs GSP per capita (annual growth rates)

Source: Australian Bureau of Statistics, NSW Valuer General, NSW Treasury

Property tax indexation has been designed to ensure that the average indexed property tax payment (of the properties that have opted in) will grow in line with GSP per capita. When average land values



grow faster than GSP per capita, the ad valorem tax rate falls, ensuring that the average payment grows in line with GSP per capita.

If GSP per capita falls, as occurred in 2020, the average property tax payment would fall by the same amount (with a two year lag, because of the timing of data releases).

3.5 Cap of 4 per cent on year-to-year growth of property tax

The indexation formula lowers the volatility of property tax payments for the average property and diminishes volatility for properties that have land value growth substantially different from the average property.

As an additional control on the volatility of payments for individual properties, the Bill provides for a 4 per cent cap on year-to-year increases in property tax assessments (see s24(2)(b)(ii)). The property tax payable on a property will be <u>the lesser of</u>:

- (a) the amount calculated by applying the indexed tax rates; or
- (b) an amount that is 4 per cent higher than the previous year's property tax assessment.

The cap will be binding when the indexation formula would otherwise result in property tax increasing by more than 4 per cent from one year to the next. Over the past 15 years, GSP per capita has increased by an average of 3.2 per cent from year to year. Using this as a guide, property tax growth for the average property will usually be below the 4 per cent cap.

Appendix A provides two examples of how the cap would work for an individual property. The examples suppose that First Home Buyer Choice had been implemented in 2011 and examine a dwelling that becomes subject to the property tax in that year.

Changes in the tax rates are determined by the historic movements in GSP per capita and average residential land values in both examples. In both examples, the ad valorem tax rate falls after a period of strong growth of average land values and increases after a period when land value growth has been weaker.

In Appendix A, Example 1, the individual property's land values are assumed to grow at the same rate as average land values. The 4 per cent cap replaces the indexed amount of property tax in three out of ten years after the dwelling becomes subject to the property tax. The cap lowers the amount of tax paid over those ten years by 0.3 per cent.

In Appendix A, Example 2, the reported land values are the values of an actual property in Sydney. Because this property's land values are more volatile than the average land value, and because the property's land value grows by more than the average property, the 4 per cent cap binds more frequently: in eight out of ten years. The cap lowers the tax paid over those ten years by 2.5 per cent.

Appendix A, Example 1 also illustrates the effectiveness of the indexation formula in addressing volatility in average land values. In 2015, 2016 and 2017, average land values increased by 21.44 per cent, 10.44 per cent and 13.92 per cent. In each of those years, the annual increase in property tax is between 1.8 per cent and 3.8 per cent, without any invocation of the 4 per cent cap.



4. Effects of First Home Buyer Choice

4.1 Home ownership

The First Home Buyer Choice is expected to increase home ownership – the share of homes that are owned by owner-occupiers rather than property investors.

The scheme will lower the up-front costs faced by first home buyers, who are the class of purchasers most likely to face binding deposit constraints. First home buyers are typically younger than other purchasers, and it takes time to save the funds required for a deposit and other up-front costs. Depending on individual household saving rates, removing the requirement to pay duty will lower the time needed to save for the up-front costs by around 2 to 2.5 years. This will help to bring forward in time a cohort of first home buyer purchases, providing a permanent increase in the rate of home ownership.

The differential property tax rates for owner-occupiers and investors also changes the relative prices faced by these two groups, increasing the share of properties that will be purchased by owner-occupiers each year.

4.2 Dwelling prices

The First Home Buyer Choice is not expected to have any noticeable effect on dwelling prices.

About 6,200 first home buyers are expected to opt into property tax on average each year over the first four years. By volume, this cohort represents about 4 per cent of all residential transactions, and roughly 6 per cent of all transactions between \$600,000 and \$1.5 million.

The reform's net cost to State revenue (i.e. forgone stamp duty less the new property tax revenue) is expected to average about \$160 million per year. This is about 0.1 per cent of the consideration for all residential transactions, and about 0.2 per cent of the consideration paid for residential transactions between \$600,000 and \$1.5 million. These figures provide an estimate of the likely upward price pressure arising from the reform. Of course, this upward price pressure is the result of increased numbers of first home buyers entering the market, consistent with the Government's goal of increasing home ownership.

Currently, Sydney house prices are falling by about 1.5 per cent per month, and monthly price changes (positive and negative) of 1 per cent or more are a regular feature of the residential property market. In this context, upward price pressure in the order of 0.1 per cent or 0.2 per cent is not expected to be noticeable.

Experience in the Australian Capital Territory (ACT) is consistent with this expectation of no noticeable effect on prices. Since 2012, the ACT has been engaged in a process of gradually lowering stamp duty rates and increasing local government rates. In 2020, two studies of the effects of this reform were released, examining the first 7 years of the transition.

In a study by NATSEM / ANU, without controls, that took account of broader factors affecting dwelling prices across Australia, the reform was associated with a 9 per cent increase in house prices and 4 per cent increase in unit prices. But once movements in other capital city dwelling prices were included as a control, the estimated effect of the reform on dwelling prices was found to be statistically insignificant.



The authors conclude:

Overall, the difference-in-difference approach to estimate effect of the reform was problematic. The difficulty in finding a convincing control group appears to be a substantial one. The fact that the impact estimates change substantially when we use different control groups or different sets of covariates hint that the estimates are not robust to alternative control groups or alternative data source. The estimates seem to be driven more by the control group choice than by the territory's tax reform. We thus strongly encourage readers to interpret and apply these results cautiously.

In the second study of the ACT reform, by COPS (Centre of Policy Studies, Victoria University), price movements in Queanbeyan and other nearby parts of NSW were used as a control to account for price changes that were not caused by the reform. Using properties that are close substitutes for properties in the ACT as a control group would seem more likely to identify changes arising from the ACT tax system, than the NATSEM / ANU study. There are many reasons why price trends in other capital cities might differ from Canberra's home price trends. But the Queanbeyan market is likely to move closely with the Canberra market, apart from any differences arising from the tax reforms. Despite using an arguably superior control group, the COPS study found that the ACT reform has had no significant effect on property prices.

4.3 Fiscal impacts

The Budget impact of the First Home Buyer Choice is estimated to be \$728.6 million over four years in net lending terms. This consists of:

- lower transfer duty revenue of \$751.8 million,
- raising \$88.2 million of property tax revenue, and
- implementation funding of \$65 million.

Over the Planning Years (2026-27 to 2031-32), the First Home Buyer Choice is estimated to have an impact of \$918.5 million in net lending terms.

The GST impact depends on the relative economic performance of other states as well as NSW. This is an unknown, so only approximate estimates are possible. The Commonwealth Treasury generally requests the Commonwealth Grants Commission (CGC) to review its methodology every 5 years. On this basis, the next review is expected in 2025. A change in methodology at that time could affect the impact of First Home Buyer Choice on the GST relativities.

The GST impact of First Home Buyer Choice is not expected to be material over the Planning Years. This is primarily because the volume of transactions is low relative to the total volume of residential transactions in NSW. This means that the CGC is unlikely to make any special adjustment to its methodology to account for the introduction of First Home Buyer Choice.



Appendix A: Effect of 4 per cent cap

The two examples below suppose that property tax had been implemented in 2011, and a specific property had become subject to the property tax in that year. Historic data on growth of GSP per capita and average land value are used in both examples, so that property tax rates are the same in both examples.

In Example 1, the specific property's land value grows at the same rate as average land value. Example 2 uses the actual land values of a specific property in Sydney. The dwelling's land value is more volatile in Example 2, with the result that the 4 per cent cap binds more frequently.

Fixed

component 400.00

411.74

435.41

452.66

462.13

470.34

482.23

496.01

518.24

531.31

546.17

Ad valorem rate

0.30%

0.31%

0.33%

0.33%

0.30%

0.25%

0.23%

0.21%

0.21%

0.23%

0.23%

Example 1 - this dwelling's land value grows in line with the average land value growth

	This dwelling's	Growth of GSP per	Growth of average	Growth of this property's
	land value	capita	land value	land value
2010	292,683	2.94%		
2011	293,720	5.75%	0.35%	0.35%
2012	293,833	3.96%	0.04%	0.04%
2013	301,847	2.09%	2.73%	2.73%
2014	340,383	1.78%	12.77%	12.77%
2015	413,361	2.53%	21.44%	21.44%
2016	456,531	2.86%	10.44%	10.44%
2017	520,067	4.48%	13.92%	13.92%
2018	541,968	2.52%	4.21%	4.21%
2019	499,696	2.80%	-7.80%	-7.80%
2020	519,290	-1.29%	3.92%	3.92%
2021	647,844	2.52%	24.76%	24.76%

Indexed	Amount of 4%	Property	Growthof	Saving arising
amount	cap	tax	property tax	from the cap
1,278.05		1,278.05		-
1,315.57	1,329.17	1,315.57	2.94%	-
1,391.20	1,368.19	1,368.19	4.00%	23.00
1,446.29	1,422.92	1,422.92	4.00%	23.37
1,476.56	1,479.84	1,476.56	3.77%	-
1,502.80	1,535.63	1,502.80	1.78%	-
1,540.77	1,562.91	1,540.77	2.53%	-
1,584.80	1,602.40	1,584.80	2.86%	-
1,655.85	1,648.19	1,648.19	4.00%	7.66
1,697.61	1,714.12	1,697.61	3.00%	-
1,745.07	1,765.51	1,745.07	2.80%	-

Example 2 - this dwelling's land value grows at rates that differ from the average property

	This dwelling's	Growth of GSP per	Growth of average	Growth of this property's]	Fixed		Indexed	Amount of 4%	Property	Growthof	Saving arising
	land value	capita	land value	land value		component	Ad valorem rate	amount	cap	tax	property tax	from the cap
2010	292,683	2.94%										
2011	307,317	5.75%	0.35%	5.00%		400.00	0.30%	1,278.05		1,278.05		-
2012	291,805	3.96%	0.04%	-5.05%		411.74	0.31%	1,357.41	1,329.17	1,329.17	4.00%	28.24
2013	291,805	2.09%	2.73%	0.00%		435.41	0.33%	1,384.60	1,382.34	1,382.34	4.00%	2.26
2014	339,512	1.78%	12.77%	16.35%		452.66	0.33%	1,413.23	1,437.63	1,413.23	2.24%	-
2015	406,829	2.53%	21.44%	19.83%		462.13	0.30%	1,473.97	1,469.76	1,469.76	4.00%	4.20
2016	465,366	2.86%	10.44%	14.39%		470.34	0.25%	1,486.48	1,528.55	1,486.48	1.14%	-
2017	564,875	4.48%	13.92%	21.38%		482.23	0.23%	1,561.25	1,545.94	1,545.94	4.00%	15.31
2018	611,707	2.52%	4.21%	8.29%		496.01	0.21%	1,678.61	1,607.78	1,607.78	4.00%	70.83
2019	550,244	2.80%	-7.80%	-10.05%		518.24	0.21%	1,802.23	1,672.09	1,672.09	4.00%	130.14
2020	576,585	-1.29%	3.92%	4.79%		531.31	0.23%	1,815.59	1,738.97	1,738.97	4.00%	76.62
2021	690,732	2.52%	24,76%	19.80%		546.17	0.23%	1.877.35	1.808.53	1.808.53	4.00%	68.82



Appendix B: Residential holding periods

The following tables set out estimates of how long people own residential property under the existing NSW tax system.

The tables are drawn from NSW Treasury Research Paper 22/13, by Bandeira, Malakellis and Warlters.

	All	Owner-occupiers	Investors
Mean	18.8	22.6	13.7
Median	9.7	10.5	8.8

Central Moments for Holding Periods of Purchasers

Probability that a property is sold in successive years of ownership

The *x*-th row on the left half of the following table indicates the share of purchasers expected to sell their dwelling in the *x*-th year of ownership. The *x*-th row on the right of the table indicates the share of purchasers expected to sell their dwelling in the *x*-th year of ownership <u>or earlier</u>.

Prot	bability Den	sity Function	s	Cum	ulative Distri	bution Funct	tions
Year	All	Owner- occupiers	Investors	Year	All	Owner- occupiers	Investors
1	2.02%	1.10%	3.26%	1	2.02%	1.10%	3.26%
2	5.46%	4.40%	6.90%	2	7.48%	5.50%	10.17%
3	6.63%	6.12%	7.33%	3	14.12%	11.61%	17.49%
4	6.72%	6.55%	6.95%	4	20.84%	18.16%	24.44%
5	6.39%	6.37%	6.41%	5	27.23%	24.53%	30.85%
6	5.89%	5.91%	5.86%	6	33.11%	30.45%	36.71%
7	5.33%	5.35%	5.31%	7	38.45%	35.80%	42.02%
8	4.76%	4.77%	4.75%	8	43.21%	40.57%	46.77%
9	4.19%	4.21%	4.17%	9	47.40%	44.77%	50.94%
10	3.64%	3.68%	3.59%	10	51.04%	48.45%	54.53%
11	3.13%	3.20%	3.05%	11	54.18%	51.65%	57.58%
12	2.69%	2.77%	2.59%	12	56.87%	54.42%	60.16%
13	2.32%	2.38%	2.23%	13	59.18%	56.81%	62.39%
14	2.01%	2.04%	1.98%	14	61.20%	58.85%	64.37%
15	1.77%	1.74%	1.81%	15	62.97%	60.59%	66.18%
16	1.59%	1.48%	1.72%	16	64.56%	62.08%	67.90%
17	1.44%	1.26%	1.67%	17	66.00%	63.34%	69.58%
18	1.31%	1.06%	1.65%	18	67.31%	64.40%	71.23%
19	1.21%	0.90%	1.64%	19	68.52%	65.30%	72.87%
20	1.13%	0.75%	1.63%	20	69.65%	66.05%	74.50%
21	1.05%	0.63%	1.61%	21	70.70%	66.68%	76.11%



Prob	ability Den	sity Function	S	Cumula	tive Distrik	oution Function	ons
Year	All	Owner- occupiers	Investors	Year	All	Owner- occupiers	Investors
22	0.98%	0.53%	1.59%	22	71.68%	67.21%	77.70%
23	0.92%	0.45%	1.56%	23	72.60%	67.66%	79.26%
24	0.86%	0.38%	1.52%	24	73.47%	68.04%	80.78%
25	0.81%	0.32%	1.48%	25	74.28%	68.36%	82.26%
26	0.77%	0.28%	1.42%	26	75.05%	68.64%	83.68%
27	0.72%	0.24%	1.37%	27	75.77%	68.89%	85.05%
28	0.68%	0.22%	1.31%	28	76.45%	69.11%	86.36%
29	0.65%	0.21%	1.24%	29	77.10%	69.31%	87.60%
30	0.61%	0.20%	1.18%	30	77.72%	69.51%	88.77%
31	0.58%	0.20%	1.11%	31	78.30%	69.70%	89.88%
32	0.56%	0.20%	1.04%	32	78.86%	69.91%	90.92%
33	0.53%	0.21%	0.97%	33	79.39%	70.12%	91.88%
34	0.51%	0.23%	0.90%	34	79.91%	70.35%	92.78%
35	0.50%	0.25%	0.83%	35	80.40%	70.60%	93.61%
36	0.48%	0.28%	0.76%	36	80.89%	70.88%	94.37%
37	0.47%	0.31%	0.70%	37	81.36%	71.19%	95.07%
38	0.47%	0.35%	0.63%	38	81.83%	71.54%	95.70%
39	0.47%	0.39%	0.57%	39	82.30%	71.93%	96.27%
40	0.47%	0.43%	0.51%	40	82.76%	72.36%	96.78%
41	0.47%	0.48%	0.46%	41	83.24%	72.84%	97.24%
42	0.48%	0.53%	0.41%	42	83.71%	73.37%	97.65%
43	0.49%	0.58%	0.36%	43	84.20%	73.95%	98.02%
44	0.50%	0.64%	0.32%	44	84.70%	74.59%	98.33%
45	0.52%	0.70%	0.28%	45	85.22%	75.28%	98.61%
46	0.53%	0.75%	0.24%	46	85.76%	76.04%	98.85%
47	0.55%	0.81%	0.21%	47	86.31%	76.85%	99.06%
48	0.57%	0.87%	0.18%	48	86.88%	77.72%	99.23%
49	0.60%	0.93%	0.15%	49	87.48%	78.64%	99.38%
50	0.62%	0.98%	0.13%	50	88.10%	79.63%	99.51%
51	0.64%	1.03%	0.10%	51	88.73%	80.66%	99.61%
52	0.66%	1.08%	0.09%	52	89.39%	81.74%	99.70%
53	0.67%	1.12%	0.07%	53	90.06%	82.86%	99.77%
54	0.69%	1.16%	0.06%	54	90.75%	84.02%	99.82%
55	0.70%	1.19%	0.04%	55	91.45%	85.21%	99.87%
56	0.71%	1.21%	0.04%	56	92.16%	86.42%	99.90%
57	0.71%	1.22%	0.03%	57	92.87%	87.64%	99.93%
58	0.71%	1.22%	0.02%	58	93.59%	88.86%	99.95%
59	0.70%	1.21%	0.02%	59	94.29%	90.07%	99.97%
60	0.69%	1.19%	0.01%	60	94.98%	91.26%	99.98%
61	0.67%	1.16%	0.01%	61	95.64%	92.42%	99.99%



Prot	bability Den	sity Function	S	Cumul	ative Distrik	oution Function	ons
Year	All	Owner- occupiers	Investors	Year	All	Owner- occupiers	Investors
62	0.64%	1.11%	0.01%	62	96.28%	93.53%	99.99%
63	0.61%	1.05%	0.00%	63	96.89%	94.58%	99.99%
64	0.56%	0.98%	0.00%	64	97.45%	95.56%	100.00%
65	0.52%	0.90%	0.00%	65	97.97%	96.46%	100.00%
66	0.46%	0.81%	0.00%	66	98.43%	97.27%	100.00%
67	0.40%	0.70%	0.00%	67	98.84%	97.97%	100.00%
68	0.34%	0.60%	0.00%	68	99.18%	98.57%	100.00%
69	0.28%	0.48%	0.00%	69	99.46%	99.05%	100.00%
70	0.21%	0.37%	0.00%	70	99.67%	99.43%	100.00%
71	0.15%	0.27%	0.00%	71	99.82%	99.69%	100.00%
72	0.10%	0.17%	0.00%	72	99.92%	99.87%	100.00%
73	0.05%	0.09%	0.00%	73	99.98%	99.96%	100.00%
74	0.02%	0.03%	0.00%	74	100.00%	100.00%	100.00%
75	0.00%	0.00%	0.00%	75	100.00%	100.00%	100.00%

