

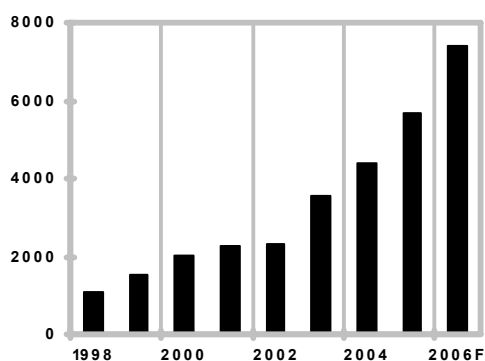
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Figure 1: Property-related tax receipts (€m)



Source: Revenue Commissioners; Davy

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#### Research Report: Irish economy

## Irish property: government finances exposed to a correction

### Property market accounts for one-sixth of tax revenue

- Tax revenue from the property market (VAT, stamp duty and capital gains tax) has tripled since 2002.
- Revenue from the property market will reach almost €7.5bn (5% of GNP) this year and accounts for almost 17% of total tax revenue, up from 5% eight years ago.

### Government finances now exposed to property market downturn

- We estimate that each 1% change in the volume of property built or traded could cost as much as €105m in tax foregone; each 1% change in price is worth about €75m.

### Deficit may approach Maastricht limit in the event of severe correction

- We model the direct and second-round effects of a construction downturn on tax revenue: in the worst case scenario, tax revenue may undershoot the Budget 2007 target by more than €3bn.
- The general government deficit may near the 3% Maastricht limit if price and volume both drop 20%.

### Assumption that the government will raise infrastructure spending to compensate for slowing market is dangerous

- Shrinking tax revenue may limit that option.

### Abolition of stamp duty on property risky

- This measure would cost around €2.7bn. Existing home-owners and developers may gain, but the government would have to plug the revenue gap.

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- Tax revenue from the booming property market has surged

## Property market accounts for increasing share of tax revenue

Record housebuilding; healthy investment in retail space, offices and warehouses; and surging prices for houses and commercial units have led to rampant growth in property-related tax receipts. The key property tax rates are as follows:

- VAT is charged at 13.5% on new housing (the end-buyer pays the *VAT-inclusive* price).
- Stamp duty is charged on new and second-hand housing, based on a rising scale in line with price (see Table 1).
- Stamp duty is charged at 9% on commercial property sales and the disposal of lands.
- Capital gains tax is charged at a rate of 20% on the disposal of residential (as long as it is not a principal private residence) and commercial property as well as the sale of lands.

**Table 1: Property-related stamp duty rates\***

Price of house (€m)	New		Second-hand	
	FTBs/Owner-occupiers**	Investors	FTBs	Owner-occupiers/Investors
0 - 127,000	0%	0%	0%	0%
127,001 - 190,500	0%	3%	0%	3%
190,501 - 254,000	0%	4%	0%	4%
254,001 - 317,500	0%	5%	0%	5%
317,501 - 381,000	0%	6%	3%	6%
381,001 - 635,000	0%	7.5%	6%	7.5%
635,001+	0%	9%	9%	9%

\* Land/Sites/Commercial property: priced above €150,000 are subject to 9% stamp duty; sliding scale (9% to 1%) below €150,000.

\*\* As long as property does not exceed 125 metres square; in that case, FTBs/owner-occupiers pay according to the second-hand scale for FTBs.

Source: Revenue Commissioners; Department of Finance

- Property-related VAT and stamp duty receipts up eight-fold in less than a decade

### VAT on new housing has increased eight-fold since 1997

By the end of this year, annual VAT accumulated on new housing sales will have jumped eight-fold since 1997. Total revenue from that source was less than €400m nine years ago; it rose five-fold to reach €2bn in 2004 and may amount to €3.2bn for full-year 2006.

### Property-related stamp duty growth almost as strong

Property-related stamp duty receipts (stamp duty is also charged on purchases of securities) were lower than housing-related VAT in 1997. Revenue from that source has jumped from €323m in 1997 to €2bn in 2005 and to about €2.7bn in 2006. Housing, lands, sales and commercial property transactions all affect this aggregate (the rate of duty charged has been fiddled with slightly during that period).

Property-related stamp duty accounted for 73% of total stamp duty receipts, up from 60% nine years ago.

- Capital gains tax from property sales has doubled in three years

- Property-related tax revenue now amounts to 17% of the total

**Capital gains tax from property has doubled in the past three years**

Capital gains tax (CGT) is also charged on housing sales as long as the sale is not of a person’s principal private residence. Commercial property and lands are also liable for CGT.

The latest split of CGT into the property part and the rest, provided by the Irish Revenue Commissioners, is for 2003. In that year, CGT related to property amounted to about €750m. This year, that total will have doubled to around €1.5bn.

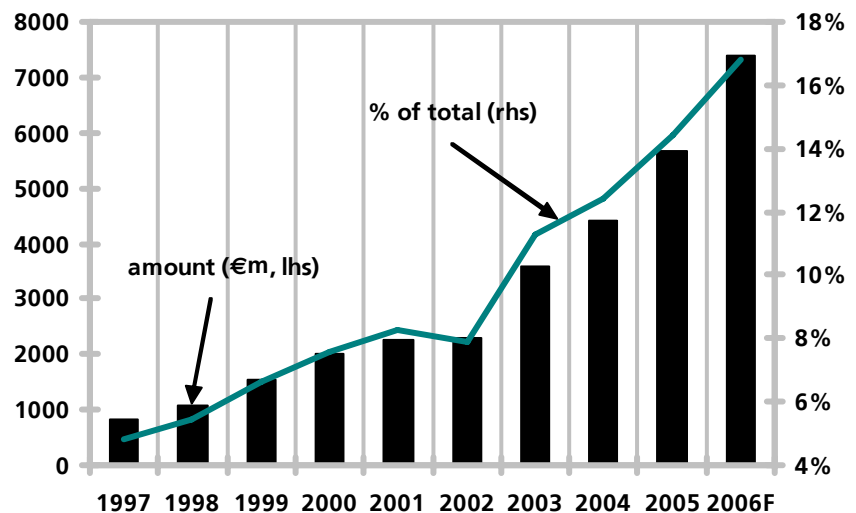
Furthermore, our analysis ignores corporation tax charged on the profits made by construction firms. This breakdown is not made available by the Revenue Commissioners. We also ignore VAT levied on the repair and maintenance of homes.

**Property-related revenue amounts to almost 17% of total taxes**

Total tax receipts from the property market have rocketed in recent years. Property-related receipts from VAT, stamp duty and CGT will come in just short of €7.5bn in 2006 (see Figure 2).

That total has tripled since 2002 and jumped seven-fold since 1998. As a share of total tax receipts, property revenue accounts for almost 17% of the total. That compares with 5.5% in 1998 and 8% in 2002.

**Figure 2: Property-related tax revenue**



Source: Revenue Commissioners; Davy

## Sensitivity of overall tax receipts to property market is significant

We modelled the sensitivity of property-related tax receipts to a building sector slowdown.

### Various tax revenue outcomes compared with end-2007 baseline

We forecast the end-year 2006 revenue figures based on trends to date, government projections and what we expect for Q4.

We then make a detailed post-Budget 2007 *baseline projection* for next year, having estimated the potential final out-turn for 2006. We assume the following:

- Tax cuts worth about €1bn will be delivered in Budget 2007.
- The rate of growth in current and capital expenditure in 2007 will be similar to that seen in 2006.
- Property-related tax receipts do not grow at all in 2007 (price/volume unchanged).
- A standard elasticity for the remainder of tax revenue.
- That gives us a projected baseline Exchequer Borrowing Requirement (EBR) of -€3.5bn for the closing 2007 position and a General Government Balance (GGB) of -€1.5bn.

- **Property-market correction has direct and second-round impact on tax revenue**

Our model calculates the direct effect on property-related tax receipts plus the second-round effect on the rest of tax revenue from a correction in property compared with that baseline. In other words, if the property sector slows it will also affect overall growth in the economy. This, in turn, will affect non-property tax revenue.

We estimate the sensitivity of (i) total tax revenue and (ii) the aggregate government budgetary position to the year-on-year change in the price and volume of Irish property (residential, commercial and lands). Let us look first at the raw revenue impact in Table 2 below.

**Table 2: Total tax receipts: deviation from baseline\* (€m, based on changes in price/volume in property market)**

	Volume						
	-20%	-10%	-5%	0%	5%	10%	20%
-20%	-3,267	-2,372	-1,924	-1,477	-1,029	-581	314
-10%	-2,676	<b>-1,707</b>	-1,223	-738	-254	231	1,200
-5%	-2,381	-1,375	-872	-369	134	637	1,643
Price***							
0%	-2,086	-1,043	-521	0	522	1,043	2,086
5%	-1,790	-711	-171	369	909	1,449	2,529
10%	-1,495	-378	180	738	1,297	<b>1,855</b>	2,972
20%	-904	286	881	1,477	2,072	2,667	3,858

\* year-on-year change compared with 2006

\*\* baseline growth of 7.5% in nominal GDP assumed (0% growth in property price and volumes): corresponds to EBR of -€3.5bn and GGB of -€1.5bn

\*\*\* second-round price effects on non-property tax revenue ignored

Source: Davy

- Relatively easy to model direct effects on property-related tax revenue

### **Our model is lower-bound estimate for what may happen to tax revenue, due to difficulties measuring second-round effects**

Tax receipts are highly sensitive to changes in price or volume. In our model, there is a direct impact on property-related tax receipts from the value of property built and traded. It is relatively easy to model the sensitivity of VAT from housing, stamp duty from commercial property and lands, and CGT, to changes in the volume or price of property.

But for the total impact on tax revenue and, hence, the government balance, second-order effects are important.

- Our model underestimates second-order effects

With regard to second-order effects on other (non-property) tax revenue, we only model the effect of changes in the volume of residential activity explicitly. We ignore the volume of private non-residential building due to lack of adequate data. As for price effects, we assume there are none for convenience.

In reality, ignoring price effects is a simplification. Take house prices, for example. These may well affect consumer spending via wealth effects or mortgage equity withdrawal. Consumer and business confidence may be affected. As a result, a knock-on negative effect to income and consumption taxes is likely.

For this reason, our modelling can be seen as the lower-bound estimate for what may actually happen for each 1% change in volume and/or price. In other words, the true outcome may be somewhat worse.

### **Each 1% in volume of property is worth €100m+ in revenue**

Overall, a 1% rise (fall) in the volume of property on average is worth almost more than €100m in tax revenue. For price, the equivalent figure is about €75m.

In Table 2, read across the horizontal for volume and down the vertical for price. For example, a 10% increase on average in *both* price and volume (of houses, lands and commercial property) would be worth €1.85bn extra in tax receipts in 2007 compared with 2006 (highlighted in black in Table 2).

If price and volume *both* dropped 10%, receipts would decline €1.7bn year-on-year (highlighted in green in Table 2).

## Severe downturn may mean breach of Maastricht deficit criterion

- Worst-case scenario: test of 3% Stability and Growth Pact GGB limit

We will now look at the impact on the aggregate government finances. We examine the deviation of the Exchequer balance and the GGB (the standard metric for the euro area) from our baseline, taking into account the tax revenue sensitivities outlined in Table 2.

**Table 3: Exchequer Balance/General Government Balance based on scenarios for property market, end-2007 (€m)**

		Volume				
		-20%	-10%	0%	10%	20%
	-20%	-6775 / -4775	-5875 / -3875	-4975 / -2975	-4075 / -2075	-3200 / -1200
	-10%	-6175 / -4175	-5200 / -3200	-4250 / -2250	-3275 / -1275	-2300 / -300
Price	0%	-5575 / -3575	-4550 / -2550	-3500 / -1500	-2450 / -450	-1425 / 575
	10%	-5000 / -3000	-3875 / -1875	-2750 / -750	-1650 / 350	-525 / 1475
	20%	-4400 / -2400	-3225 / -1225	-2025 / 25	-825 / 1175	350 / 2350

Source: Davy

In a severe downturn, the GGB may approach the Maastricht or Stability and Growth Pact (SGP) limit of a deficit of 3% (see Table 4, green text). We define “severe” as a situation where prices and volume both decline by 20% in 2007.

**Table 4: Exchequer Balance/General Government Balance based on scenarios for property market, end-2007 (% GDP)**

		Volume				
		-20%	-10%	0%	10%	20%
	-20%	-3.6 / -2.5	-3.1 / -2.0	-2.6 / -1.6	-2.1 / -1.1	-1.6 / -0.6
	-10%	-3.3 / -2.2	-2.7 / -1.7	-2.2 / -1.2	-1.7 / -0.7	-1.2 / -0.2
Price	0%	-3.0 / -1.9	-2.4 / -1.3	-1.8 / -0.8	-1.3 / -0.2	-0.7 / 0.3
	10%	-2.7 / -1.6	-2.0 / -1.0	-1.4 / -0.4	-0.9 / 0.2	-0.3 / 0.8
	20%	-2.3 / -1.3	-1.7 / -0.6	-1.1 / 0.0	-0.4 / 0.6	0.2 / 1.2

Source: Davy

In that situation, the EBR reaches €6.8bn (see Table 3) in our model. The GGB would be in deficit to the tune of around €4.8bn or 2.5% of GDP. But, as we noted above, this is very much the lower bound estimate because we probably underestimate second-round effects. It is likely that the GGB would seriously threaten, if not exceed, the 3% limit. We envisage a 20% price and volume decline that would lead to such an eventuality as worst-case scenario.

- Swing between best- and worst-case scenario for government deficit equates to 4% of GDP

What about the best-case scenario? What if the opposite happens and price and volume both zoom ahead by 20%? The difference would be at least €7bn for the EBR and GGB compared with the worst-case scenario. That is equivalent to a whopping 4% of (2007) GDP.

## Boosting infrastructure spend to compensate for housing downturn far from certain

A popular view is that the government can simply lift infrastructure spending to compensate for a housing downturn. The theory goes like this: increased investment expenditure by the Exchequer would soak up redundant construction workers because their skills would be transferable, helping to smooth the economic downturn.

However, this theory ignores an important link between housing and infrastructure spending: tax revenue.

- **Boosting infrastructure spending: possible gap between theory and practice**

The building boom has led to a surge in tax revenue, as discussed earlier. If a severe property downturn occurs and the country is close to breaching the euro area budget deficit criterion (3% of GDP limit), it would be very difficult for the government to scale up investment in infrastructure.

In theory, we have a good deal of leeway to borrow for investment purposes due to our low debt to GDP ratio (the second-lowest in the euro area at 26% this year). In addition, a property downturn where price and volume both drop 20% in one year is unlikely. But even in a more gradual slowdown, where tax revenue is coming under pressure without threatening the SGP limit, the question begs: will any administration borrow significantly for capital spending purposes while being mindful of the mistakes of the late 1970s/early 1980s?

## Reduction/abolition of stamp duty on property is risky

One of the incumbent government parties recently mooted that the reduction or abolition of stamp duty is a possible measure for the forthcoming Budget in December. We wonder if this party is aware of where all the bonus tax revenue is coming from (see Table 5).

Table 5: Stamp duty from property

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006F
€m	323	387	551	674	671	666	1075	1461	2001	2701
% of total tax receipts	1.9	2.0	2.4	2.5	2.5	2.3	3.4	4.1	5.1	6.1

Source: Revenue Commissioners; Davy

- **Stamp revenue amounts to more than 6% of the total**

In our view, the total abolition of stamp duty would be a misguided policy. Stamp duty receipts from property rocketed from €0.3bn in 1997 to €2bn last year. Since 2003, receipts from this source have tripled. Three years ago, property-related stamp duty receipts made up 3.4% of total tax revenue; this year they will account for 6.1% of the total.

Had the policy been enacted this year, the Department of Finance would have foregone €2.7bn in revenue. Stamp duty on residential property alone amounts to about half that total.

- Shortfall would have to be made up by raising other taxes or cutting expenditure

The problem is that the shortfall has to be made up elsewhere. Let us say that stamp duty on property transactions was abolished. That equates to 1.8% of this year's nominal GNP. Taxes would have to be raised elsewhere or expenditure growth curtailed to compensate. Depending on what other taxes were increased (or expenditure cut) to fill the gap, it is possible that the policy would not actually be neutral for the economy as a whole, but mildly deflationary.

In practice, abolishing stamp duty may lead to the ex-stamp duty prices re-adjusting relatively quickly to the previous stamp duty-inclusive level. It may amount to an inequitable cash transfer from the government to vendors and developers.

- End result possibly mildly deflationary

Consumption tax (either excise duty or VAT) would probably be hiked to fill the revenue gap. The consequent impact on economic growth depends on the marginal propensity to consume of those who benefit (cut in stamp duty) versus those who suffer (compensating hike in consumption tax) from the policy. In that regard, we anticipate that younger age-groups will suffer more than older cohorts from such a policy change, thus leading to a slight deflationary impulse.

#### **Fortunately, the government has been prudent (so far)**

Luckily, the government has so far been prudent in its assumptions for the property market. Evidently, it would be folly to assume strong growth in the sector given the potential for a massive swing in tax revenue, as shown in our sensitivity analysis.

For example in Budget 2005, it conservatively budgeted that (total) stamp duty would *drop* 1.5% in 2006 over 2005 and for an increase of 8% in (total) VAT receipts. It expected CGT to rise a meagre 4%.

- €2bn tax windfall from property market in 2006

Its exact assumptions for the property market are unclear, but it is reasonable to assume that any overshoot on revenue under the key property headings (viz. stamp, VAT and CGT) is due to the unexpected buoyancy of the sector. Based on the tax profile for January-September, we think the property bonus amounts to about €1.25bn year to date. It could be €2bn for the full year.

#### **Big problem: cyclical revenue leads to structural liabilities**

Another problem is evident from ongoing (and unbudgeted) windfall gains from the buoyant property market. Those windfall gains are often flushed back into the system. Pro-cyclical fiscal policy is the result.

Huge growth in revenue from a cyclical sector such as construction has been used in recent years partly to finance a binge in public sector employment. This is superficially fine while tax revenue continues to gush; the structural problem only becomes noticeable when property-related receipts dry up.

Public sector workers are not only paid more on average than any other workers in the economy, but their pension entitlements are generous.

- Long-term strain on public finances from public sector hiring spree

Moreover, job security is recognised to be higher than in the private sector.

In the medium-term, this leads to increased strain on the public finances – similar to an increase in the number of government bonds outstanding. The difference is that the coupon to be paid on these bonds (i.e. public sector workers) is at a minimum index-linked. Public sector wages are set to grow indefinitely at least in line with inflation, based on national wage agreements and benchmarking exercises.

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