

Summary

The box-model suitable for Sweden?

Introduction

This study presents a “box model” for uniform capital income and property taxation.¹ What, then, is a box model? The name is taken from the Dutch model for standard taxation of financial income, which has remained essentially unchanged since it was introduced in 2001. Unlike traditional income taxation, the point of departure is that all assets are presumed to generate the same expected return, including benefits in kind and capital gains. The fundamental premise of the box model is that assets and liabilities are reported at market value and a fixed standard return is calculated on the net of assets less liabilities, upon which tax is levied.

A box model adjusted to Swedish conditions is developed in this study. The potential effects on public finances and distribution caused by a switch to a box model are identified. The problems that a transition to the box model might entail and possible transitional solutions are also discussed.²

Why a box model should be implemented

The uniformity in capital income taxation introduced with the major tax reform of 1991 has been gradually undermined through several major and minor reforms. The system has lost its homogeneity, which has created problems that have become increasingly troublesome, particularly in the housing market. The cap on the property charge introduced in 2008 lowered the level of property tax and severed the link to the market value of the home. The low tax on property in relation to other assets has benefited homeowners and driven up real estate prices. In parallel, property taxation was shifted to some extent to realised capital gains, which has diminished the housing supply and further contributed to driving house prices up. Moreover, generous allowable deductions of interest expenses have stimulated household indebtedness, with adverse consequences on risk-taking and financial stability.

The imbalance between supply and demand in the market for houses and cooperative flats, which is leading to higher housing prices, is largely due to the lock-in effects caused by existing capital gains taxation at the time of sale.³ The problems with the current system have become more significant in pace with rising real estate prices. A transition to a more appropriate system has thus become more pressing. Due to the current “moving tax”, as the capital gains tax on the profit is triggered by sales, the proceeds that a homeowner gets after tax are often

¹ The study expands and delves deeper into an earlier presentation in *Ekonomisk Debatt* 2015, nos. 7 and 8.

² The proposed design of a Swedish box model (Chapters 2-6) was prepared by Professor Sven-Olof Lodin. The distribution policy analysis presented in Chapter 7 was performed by Professor Peter Englund. The authors co-wrote the economic summary of the box model proposal presented in Chapter 8. Susanna Kinnman performed the model simulations in Chapter 8 and David Sundén produced other tables related to the relevant aspects of the taxation.

³ In an earlier ESO report, Peter Birch Sørensen (2010) observes this effect of the current capital gains taxation. In Section 7.3, he also recommends a switch to standardised annual taxation of an imputed annual risk-free appreciation in value for both financial portfolio investments and owner-occupied dwellings.

not sufficient to move to an equivalent or, even less so, more expensive home, in spite of rapidly rising prices. In cases of long-term ownership, taxes upon sale of a home can be substantial, which reduces the incentive to move house. This obstructs efficient utilisation of the total housing stock, which exacerbates the housing shortage, while the reduced housing supply (about 40 per cent reduction in number of one-family houses at sale between 2012 and 2016) is leading to further price increases. Buyers are becoming increasingly dependent upon mortgage loans, while borrowing is facilitated by the deductibility of interest on debt.

A box model is capable of managing these problems, partly because taxation of the appreciation in value is not tied to the sale of the property. This eliminates the lock-in effect and the supply of previously owned homes should increase, partly through limitation of the interest deduction, which constrains household access to loans.

Proposal for a Swedish box model

The main elements of the design of the box model proposed in this study are based on the box taxation that has been applied with no changes in the Netherlands since 2001. The idea is that the box model will replace most of the present capital income taxation, including capital gains tax, as well as the various forms of residential property taxation. The model includes both one- and two-family houses and cooperative flats in the box to achieve greater uniformity and fairness in residential property taxation. All personal debts that are not associated with other sources of income are included in the debit side of the box. The tax base is a standardised yield calculated on the net within the box (assets minus liabilities). The taxable yield is imputed at 4 per cent of the net value if the net is positive, which is taxed at 30 per cent, and at zero if the net is negative. Debts that exceed the value of the assets thus do not qualify for a tax deduction. The standard tax of 4 per cent is intended to include both direct and indirect yield and, effectively entails a tax of 1.2 per cent of the net within the box. There is thus no taxation upon sale of a home or shares of stock, for example. The tax is instead levied on an ongoing basis over the period the asset is held. This completely eliminates the lock-in effect that the current capital gains tax can cause. As a result, the tax will have no effect on a decision to sell.

Under this proposal, the standard yield would thus be fixed and independent of the current interest rate and business cycle. Alternatively, it would be possible to allow the standard yield to vary, for example, along with the treasury-bill yield. Evaluations of the Dutch system have, however, all emphasised the strength of having a stable and unchanged yield regardless of economic conditions and inflation. This makes not only the tax system but the entire economy more stable. Therefore, a fixed yield of 4 per cent has been chosen.

In addition to conventional bank savings, only market-listed financial assets that are not subject to other taxation are included in the box. This excludes, for example, unlisted shares, especially in “3:12” companies, and participating interests in other companies. The proposal is to include in the box only 50 per cent of assets that generate only direct yield, such as conventional bank savings, considering that these are associated with lower return but also lower risk. This also applies to debt. If the net box value is negative after debt is subtracted, the proposed box model does not allow any deduction. Consequently, the equivalent to the present high interest deduction, which is the other major problem with taxation at present, will be very restrictive.

Summary of the tax base for the proposed box model

Included on the **asset side**:

1. Market-listed financial instruments, at market value
2. 50 per cent of nominal assets, at nominal amount

3. Private endowment insurance policies, at the value for the tax year (but not pension insurance policies)
4. Residential property, at the assessed building value for houses and, for cooperative and freehold flats, the associated share of the assessed tax value of the property.

Fifty per cent of private debts that are not linked to another source of income are included on the **liability side**.

A standard income of 4 per cent is calculated on the net of assets and liabilities, which is taxed at 30 per cent. Any negative net value in the box is not tax deductible. In other words, the value of net assets is taxed at 1.2 per cent.

Alongside box taxation, “capital income” will be retained as a category of taxable income in the income tax system to a limited extent. This will apply to assets that cannot be included in the box due to valuation problems, where income minus associated interest will be taxed. This includes, for example, income from unlisted securities, primarily 3:12 shares and, analogous to the ISK model (so called “investeringssparkonton”, ISK), certain substantial securities holdings. The owners will be taxed on income derived from these assets under capital income.

How assets should be valued in the box

Determination of the tax base for *financial assets* does not entail any particular technical problems. Quoted market values can be applied, as well as the value of bank deposits and other easily available nominal assets.

Valuing *residential property assets* in a box model runs into considerably bigger problems. At present, because cooperative flats are not subject to property taxation and because the implicit yield on the capital invested is not taxed other than in the form of capital gains tax upon sale of the property, there is considerable inequity between taxation of ownership of cooperative flats compared to ownership of houses. In both cases, quoted market prices are unavailable. The only feasible basis of valuation should therefore be to also link taxation of cooperative flats to the property taxation system.

The big problem has to do with how to determine the tax base in practise, in each individual case, where there is no satisfactory market valuation. The residential properties that will be covered by the box model are those taxed as one- and two-family houses, of which there were 2 082 000 in 2014, and 1 041 000 cooperative flats, as well as an unknown number of freehold flats. The valuation can be based on the assessed tax value of the properties, which is based on an annual rating, which is performed more exhaustively every five years. A base-factor is determined for all properties, by which land and building values are multiplied in order to account for the differences in value depending upon local conditions. Towards that end, the country has been divided into 9 300 value zones in order to obtain an equivalent general market price level – a “base value factor” – in each zone. This varies between 1.5 and 40 and guides the levels for both land and building values.

Nothing equivalent to the location value is included for multi-family dwellings, which include rental flats, cooperative flats and freehold flats. Land value is instead determined primarily through the floor area ratio (that is, the ratio of the permitted dwelling space according to the building permission granted for the property relative to the footprint of the building). There, the dwelling space is valued based on a conservatively estimated utility-value rent (*bruksvärdehyra*). This results in a low valuation, especially for housing cooperatives, with large differences in the valuation of different types of residential property. In order to obtain a relatively equal valuation in the box model, the *assessed tax value of the building* has therefore

been used for one- and two-family houses, while the share of the property's total assessed tax value has been used for cooperative flats. On average, the building value accounts for more than 50 per cent of the total assessed tax value of one- and two-family houses. The differences in building values are less than for total property values that also include land values.

In this study, the assessed tax value of the building has thus been chosen as the residential property tax base for houses. The reason for this is that, in several respects, investment in a home is not comparable to a financial investment. The latter is normally liquid and is made only from a profitability perspective. An investment in a home is clearly less liquid and when the home is sold, it must generally be replaced by a new home. There are also several social factors behind the choice of home, primarily dependent upon the composition of the family. As a result, a home is rarely chosen with a view to achieving optimal yield. In the light of this, the assessed tax value of the building has been deemed most representative and has been chosen as the tax base for houses in this proposal.

How debts should be valued in the box

The tax base for debts comes in as a debit entry in the box. In that the proposal calls for only 50 per cent of bank savings to be included in the tax base, the same should apply to the debt side.

As of the 2014 tax year, total household debt amounted to SEK 3 104 billion and is still rising, in spite of the recently implemented amortisation requirement. The majority of these debts will be included in the box, apart from the minor portion attributable to other sources of income. As of the 2014 tax year, household interest expenses amounted to SEK 98.7 billion, with the highest borrowing in and near large cities. Unlike the present tax system, deductions will not be allowed for debts that exceed the aggregate asset value of the box under the proposed system. Thus, interest must be paid with taxed funds, which entails a tightening of tax legislation. The higher after-tax interest value is likely to be lower than it is in the present system.

Determination of the tax rate and the effects on public finances

The present Swedish tax rate for capital income has been 30 per cent since 1991, the same as in the Dutch box system. The proposal is for the same tax rate to apply in a Swedish box model. According to our calculations, that would have generated tax revenue of almost SEK 67 billion for the central government in 2014.

2014 is the last studied year for which complete statistical information is available concerning the tax system. We have therefore simulated the effects of a transition to a box model in 2014. In order to also see how a box model works in various phases of the business cycle, corresponding calculations were performed for 2006 (economic boom) and 2010 (recession), which can be compared to the recovery year of 2014. The results are shown in the table below.

Table Tax revenue within the box model with 4 per cent standardised yield taxed at 30 per cent

SEK billions

	2006	2010	2014
Household taxable assets inside the box	3,394	4,061	4,890
Nominal assets (50% of actual value) ^a	412	601	791
Equities and UCITS funds ^b	1,286	1,187	1,383
Endowment insurance	192	266	279
Assessed tax value, cooperative flats ^c	421	626	773
Assessed tax value of buildings, houses	1,082	1,380	1,665
Households debt (50% of actual value)^d	887	1,256	1,531
Household taxable net assets inside the box	2,507	2,805	3,360
Standardised income (4% of household taxable net assets) ^e	100	112	134
Tax revenue within the box model (30% of standardised income)	30	33.6	40.2
Additional tax revenue due to eliminated tax reduction for deficits ^f	8	9	12
Taxation according to 3:12 ^g	6	9	15
Total tax revenue under the box model	44	51	67

Note: ^a Includes deposits, bonds and Swedish fixed income funds.

^b Includes Swedish and foreign listed equities and Swedish and foreign UCITS funds (excluding Swedish fixed income funds).

^c The value for 2006 is imputed based on assessed tax value for 2010 as a proportion of Statistics Sweden's estimated shares in cooperative flats (46 per cent).

^d Includes household loans with banks and mortgage institutions and other loans (excluding CSN student loans).

^e Calculated as 4% standardised yield on household assets and liabilities.

^f Conservatively calculated as 50% x 30% of the tax reduction for deficits. The value for 2014 is imputed with the value for 2013.

^g For technical calculation reasons, this item with regard to 3:12 shares, income from which is taxed as capital income both presently and in the model, must be added to the box net for equalisation purposes.

Compared to current tax legislation, the proposed box model for 2014, including taxation of small business owners, results in an increase in the total tax levy of SEK 3.8 billion. The box model also means that a standardised estimated annual appreciation in value is included in the tax base, while capital gains tax upon subsequent sale is abolished. The value of bringing taxation forward alone can be estimated to correspond to about one-third of the present value of the capital gains taxation, which is an important advantage, above and beyond the reduced lock-in effect, compared to the present structure.

How might a transition to the box model proceed?

The box model is intended only to tax annual standardised yield on household assets. The question is how previous changes in value should be treated when the system is introduced. It is inevitable that the change in value that occurred before the transition will have to be taxed in some way.

For assets where all return is in the form of direct yield, such as bank savings, no transition problems occur, as there is no deferred tax liability. The same applies to assets invested within the framework of an existing ISK model. The latter constituted, for example, 2/3 of household shareholdings, or approximately SEK 500 billion at the end of 2015,⁴ and have risen rapidly over the years.

There may, however, be deferred tax liability related to other shares and other market-listed assets. For these, a certain standardised but limited taxation should be necessary. One

⁴ Compilation of information from the Swedish Investment Fund Association and the Swedish Tax Agency.

acceptable proposal might be to set the tax at 10 per cent of market value if the taxpayer cannot credibly show that a loss has occurred, in which case the tax should be zero. The tax could possibly be set at lower than 10 per cent of market value if the gain is minor.

A certain moderating transition rule might also be appropriate in relation to debts, as the box model does not allow deductions for deficits and there is no interest deduction allowed in the model beyond subtraction of debt inside the box. During a transition period, limited deduction can be introduced for a negative box net that arose because liabilities exceed total assets. For example, during a period of five years from the transition, an annual deduction of 20 per cent of the negative net as of the transition date could be allowed.

There should also be some form of taxation of accrued appreciation in value with regard to residential property. Several different options are discussed in the report. In summary, the proposal that the study has arrived at entails the following.

Under the proposal, 40 per cent of the tax assessed value of the home at the date of transition (SEK 3 500 billion for the 2015 tax year) can be estimated as an average appreciation in value that should be treated as a gain, which becomes taxable at a rate of 22 per cent upon the next sale, as long as the surplus is sufficient, taking into account any purchase of a replacement home. If a loss can be shown up to the date of transition, no tax will be payable. The transitional rule would apply only to appreciation in value that occurs before the box model is introduced. Over time, this will generate an estimated total increase in income to the central government of approximately SEK 30 billion. The transitional tax would normally fall due upon future sales, provided that a positive flow arises after the cost of a new home, if applicable, has been deducted.

What distributive effects arise?

The box model entails a radical departure from the present system for capital taxation. Different households will be affected in different ways. For most homeowners, the ongoing tax burden will be heavier under a box model than with the present property charge. The increase will be minor for most, but could be substantial for households that are currently far above the property charge cut-off. In return, the present capital gains tax will be entirely eliminated. Further, taxes will increase for heavily indebted households because negative box values do not provide any tax reduction. The question is how these partially offsetting effects will impact the total tax payments of individual households and thus the distribution of disposable income among various household groups.

Statistics Sweden's FASIT⁵ model was used to perform simulations that compare the box model with the present capital taxation system. The calculation is static in the sense that all types of income before tax, including capital income and interest expenses, are presumed to be the same in both tax systems. We thus disregard the fact that changes in tax revenue will, in one way or another, be borne by present or future taxpayers, as well as that the tax system can affect households' behaviour and thus the tax bases in various ways.

Summarised in bullet points, the distributional analysis shows that:

- The effects of a transition to box taxation are consistently minor in the present low interest rate environment, but larger if they are evaluated at a higher rate of interest.
- A transition to box taxation will generate higher tax payments, and thus lower disposable income.
- The negative impact is greater for families with children than for households with no children.

⁵ The Swedish acronym for "Distributional Analysis System for Income and Transfers".

- The negative impact is greater for households that own their homes than for renters.
- The negative impact is greater for young and middle-aged households than for older households.
- The regional differences are minor.
- High-income earners tend to be affected more negatively than low-income earners.
- A transition to box taxation can be expected to lead to a moderate drop in house prices. This will have negative impact primarily on older households.

What economic effects can be expected?

In addition to the significant *simplification of taxation* that the box model would entail for taxpayers and the Swedish Tax Agency, several positive economic effects that are probably even more important could arise. Above all, *more equal capital taxation* would be achieved, which would reduce existing market distortions for tax reasons. The favourable treatment of household investments in residential property would be reduced. This applies in particular to cooperative flats. Likewise, *household borrowing would be treated in a more fundamentally justified manner*, which would reduce the propensity to raise large loans.

Moreover, *the lock-in effects in the housing market caused by the present capital gains tax upon sale would be eliminated* for both houses and cooperative flats. As the annual change in value is taken into account in the calculation of yield in the box, no tax expense would arise upon moving from a larger home to a smaller one or from an owned home to rented accommodation. The homeowner would not accumulate any significant deferred tax liability. At present, the “moving tax” in many cases constitutes a serious obstacle to selling a home. The effect of a transition to a box system will be an increased supply of houses and cooperative flats on the market, which will lead to greater mobility and better utilisation of the total housing capital than is the case today, as well as better balance in the housing market without the disruptions caused by the present tax system.

Another important effect of the box model is that interest expenses up to the standardised yield level would be given adequate treatment with a right to offset against the total standardised estimated capital income (including property yield). However, mortgage debt that exceeds the amount covered by the tax value of the assets would not be tax deductible. By not allowing deductions for a negative box net, the box model would put an end to the favourable tax treatment of mortgage loans taken out to finance consumption. This, along with high house prices, which are partially tax-driven, is presently leading to high and socio-economically destabilising borrowing. Implementation of a box model would *reduce and disarm the interest deduction issue* to its proper proportions and it would no longer entail the same serious economic problems.

Overall, a transition to the box model would result in significant improvements to the function of the economy. Although a transition to the box model would be a revolutionary reform, experience shows that it can often actually be easier to implement new and radical total solutions to entire problem areas than to implement minor technical tax changes to solve partial problems, where it is easier for many special interests to find arguments and gain support for the status quo or for partial reforms that splinter the homogeneity of the tax system. It remains to be seen whether the box model outlined here can verify that experience. A public committee of inquiry should be appointed to study whether a transition to a box model of the type outlined above may be a political path for Sweden.