



SKAT

**SKAT – The Danish Tax and
Customs Administration**

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International version

The measurement of the effects of a campaign directed at Danish residents who own property overseas

Summary

The measurements described in this paper demonstrate that sending direct letters to taxpayers is an effective method of influencing their behaviour under the right conditions. The analysis also provides support for the OECD's compliance model, which is used by SKAT, the Danish Tax and Customs Administration, in that it has proved possible to influence a large group of the population with a mass mailing approach in an area where it would not be possible to produce increased compliance through the mechanism of normal audits.

In Denmark, taxpayers who own property overseas are taxed on the value of that property. The level of taxation is approximately 1% of the market value of the property. In addition, there are various special regulations and exceptions which may lead to a tax obligation exists with respect to a property or the right to use a property overseas. The Danish tax authorities have long suspected that a significant number of Danes own property overseas which they do not declare on their tax return. In light of this, a nation-wide campaign directed at owners of overseas property was instigated from the beginning of 2007.

This area is a typical example of one in which the Danish Tax Administration is dependent on taxpayers making proper declarations. It is furthermore an example of an area where a process of individual checking is not financially viable, but where a mass campaign has proved to be cost-effective.

SKAT received information from the Swedish tax authorities concerning a number of Danes who owned property in Sweden. This made it possible to measure the effects of a direct mail campaign directed at this specific group of taxpayers.

An analysis of the behaviour of taxpayers before and after the campaign demonstrated with great statistical certainty that there was a link between the declaration of property overseas and the fact that owners were personally notified that SKAT was in possession of information about their ownership of the property. The campaign thus made a very positive contribution to the achievement of the goal of collecting increased tax revenues.

The number of people who declared an overseas property to the Tax Administration doubled for the tax year 2006 in comparison with the number in the tax year 2005.¹ There is thus a clear indication that the increase can be ascribed to the effect of the overall campaign conducted by SKAT. However, no clear conclusion can be drawn about how much each of the various separate elements of the campaign contributed to the increase.

It has not been possible to make an exact cost benefit analysis of the campaign, but some calculations have been made of the amount of extra tax income it can be expected to generate. For the tax year 2006, the observed increase in property tax revenue on overseas properties is in the order of DKK 17 million. The increase in tax revenues that will arise as a result of the campaign, measured in present value and if all other factors remain equal, is conservatively estimated to be approximately DKK 99 million kroner, taking into account only the future revenues from taxes on the value of the property. If tax on rental income, taxation of principal shareholders on the value of free use of holiday homes, and tax on possible profits from sales of declared properties are also included, the increase in revenues is likely to be significantly greater. It is estimated that 20-30 person-years were used in connection with this project. There is thus a clear indication that the campaign has been particularly beneficial in revenue terms. It is also a good example of an area where traditional audits would not be cost-effective, but where sending out information does bear fruit.

¹ The tax year in Denmark is identical with the calendar year.

Introduction

A nationwide campaign was started in Denmark at the beginning of 2007 to persuade Danish residents who owned property overseas to declare this property to SKAT, the Danish Tax and Customs Administration. The campaign was prompted by the suspicion harboured by SKAT that there were a significant number of Danes who owned property overseas which they did not declare for tax purposes.

This campaign ran throughout 2007 and involved a variety of initiatives, ranging from sending out letters through visiting estate agents to participation in trade fairs.

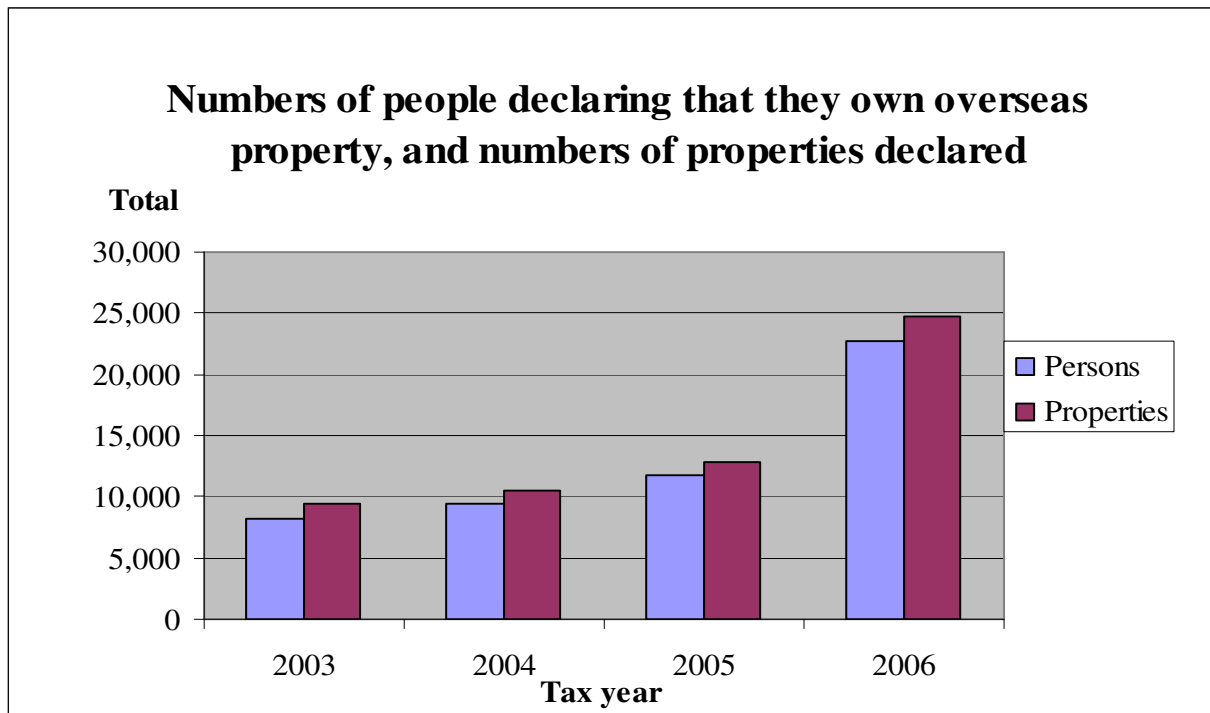
This paper presents, first of all, an analysis of the effects of the total campaign directed at improving the level of declaration of overseas properties. Next, there is an analysis of the measurement of the effects of the specific campaign initiative directed towards Danes who own property in Sweden. This measurement process focuses on the effects resulting from the letters sent out to around 5,000 Danes in the first quarter of 2007. The mailing was based on information received by SKAT from the Swedish tax authority concerning Danes who owned property in Sweden. The letter requested that property owners should take account of the information which SKAT possessed about their situation. The paper concludes with a discussion of the increase in tax revenues resulting from the campaign.

Measurement of the effects of the campaign directed at owners of overseas property in general

This analysis relates to the number of Danes who own properties overseas. It is not difficult to find indications of the overall effect of the campaign as a whole. Common sense alone suggests that an increase of 94% in the number of people declaring a property overseas, from 11,700 people for the tax year 2005 to 22,752 people for the tax year 2006, must be attributable to a great extent to the campaign run by SKAT.

Figure 1 shows that for the tax years 2004 and 2005 there was, in comparison to the previous years, only a very small increase in the number of people who owned property overseas. The tax year 2006, in contrast, saw an almost two-fold increase in the number – a clear indication that the campaign had had an effect.

Figure 1



Note: The numbers of persons indicated in the figure are numbers of individuals. In other words, if one person declared more than one overseas property, that individual is counted only once. In contrast, properties are not counted in terms of individual properties, as a number of people may be joint owners of the same property. All owners are included in the numbers of people given, whereas it would be more correct to say that the number of properties given is an expression of the number of ownerships. The total number of properties indicated is a sum of the number of property ownerships held by individuals. A single property that is declared by several individuals is thus included in the numbers multiple times.

An investigation was made as to whether the increase could be ascribed to the fact that a larger number of Danes actually became new owners of overseas property in 2006, and that the increase was thus simply an expression of the economic upswing. To elucidate this issue, the people who declared an overseas property for the first time in 2006 were separated out. This was a total of 11,642 people.² Of these, only 42 had indicated that they acquired the property before 2006. The remainder had either not stated a date of acquisition, or had stated that they acquired the property in the course of 2006. In fairness, it should be pointed out that most of the declarations were made electronically using the Internet, and that it was not possible using this form of declaration to state a year of acquisition earlier than 2006; to do so, it was necessary to contact SKAT directly.

The group of people who stated that they acquired their properties in the course of 2006 comprised 4,226 persons, equivalent to 38% of the increase in the

² The figure of 11,642 is arrived at by looking at how many of the 11,700 individuals who declared ownership of an overseas property in 2005 (as shown in Table 1) did so again in 2006. The number was 11,110. The difference between this figure and the 22,752 individuals who declared ownership of an overseas property in 2006 (see Table 1) is precisely 11,642.

number of people who declared ownership of an overseas property. Of the remaining group of 7,416 people who did not state a date of acquisition for their overseas properties, it is to be expected that the actual date of acquisition was in many cases prior to 2006. It can thus be assumed that the number of people who acquired a property earlier than 2006 was greater than the 42 who actually stated that they had done so.

There are a number of possible reasons why no date of acquisition was stated. First, the emphasis in the campaign had been on encouraging people to declare ownership of a property, in order to achieve an increase in the future level of compliance with the rules. There was less emphasis on redressing the transgressions of the past. Second, there was a disincentive to declare a date of acquisition prior to 2006, since this would incur a liability to property tax for previous years. It is assumed that of the 7,416 people who did not state a date of acquisition, the majority acquired the property before 2006. In addition, a proportion of the group of 4,226 people who gave a date of acquisition in 2006 may well not have stated the correct date, and may in fact have owned the property for several years previously.

It thus seems likely that while a proportion of the increase was attributable to more Danes acquiring overseas properties in 2006, the larger part of it was the result of SKAT's campaign.

Table 1 shows that the number of overseas properties declared in 2006 was 24,771. It should be noted, however, that it is not possible to determine the number of separate properties, since a single property may have several joint owners. The total of almost 25,000 properties will thus contain a number of instances where the same physical property is counted more than once. When the number of overseas properties declared for the tax year 2006 is compared with previous years, the same picture emerges as was seen in the analysis of the number of property owners.

Table 1. Number of overseas properties declared

	Tax year			
	2003	2004	2005	2006
Number of property owners	8,223	9,366	11,700	22,752
Number of property ownerships	9,407	10,510	12,862	24,771
Sum of part ownership shares	5,919	6,662	8,103	14,663
Average share of a property owned	63 %	63 %	63 %	59 %

Source: Extract from Danish tax declaration data, 5 November 2007.

Note: The table shows the number of individuals owning one or more overseas properties. The number of property ownerships refers to the total of the number of properties declared by individuals. The same property may therefore be included more than once in the event of joint ownership. The sum of part ownership shares forms an estimated minimum for the number of individual properties.

The actual number of separate properties covered by the declarations cannot be determined with certainty, but it is undoubtedly significantly lower than indicated in Table 1. By summing the shares owned as declared by all individuals declaring property ownership, it is possible to arrive at an estimate of the number of separate properties. The total estimated number of properties for the tax year 2006 is 14,663. However, this must be assumed to be an underestimate, since there is an incentive to state ownership of a smaller share of a property than is the actual case, but no incentive to state a larger share.

The table also shows that the average proportion owned of properties, i.e. the sum of the shares owned divided by the number of ownerships, suddenly fell in 2006 in comparison with the three previous years. If we consider only the increases from 2005 to 2006 in the *sum of part ownership shares* and the *number of property ownerships*, we find that the average ownership share related to these increases is approximately 55%. There are a number of possible reasons for this change in the average proportion of properties owned. It may be that after 2005, people more often than previously bought overseas property jointly (for example, a married couple buying a holiday home together, each with a share). It may be that the increased focus in the media on declaring ownership of overseas property led to more people declaring the correct proportion owned. Finally, it may be that those who had received “a little help” in remembering to declare property as a result of the campaign made their declarations less accurately than those who had previously declared without such encouragement.

Measurement of the effects of the campaign directed specifically at the owners of property in Sweden

With respect to one part of the effort made to encourage the owners of overseas property to make a declaration, it was possible to measure a direct connection between the campaign and the outcome in terms of increased compliance with the rules. This was with respect to the campaign targeted at owners of property in Sweden.

Data

This project was conducted on the basis of information received from the Swedish tax authority in connection with a Nordic agreement on exchange of information. Data was provided relating to 17,158 people who owned one or more houses in Sweden. For the purposes of the campaign, 12,312 of these individuals were selected.³ In total, the dataset contained 19,516 data entries, relating to 11,702 different properties.

The information sent by the Swedish authorities was linked by computer to Danish civil registration number data in order to identify the individuals concerned. This procedure produced in the first instance a list of 7,798 identified individuals. Of these, 5,337 were sent letters in the first quarter of 2007,

³ A number of people were removed from the list, for a variety of reasons. For example, people who had emigrated from Denmark were excluded, as were the spouses of people already on the list.

requesting them to take note of the information supplied by the Swedish authorities. Of those who were not sent letters, 1,938 had already registered their ownership of a property in Sweden, while the remaining group of 633 people was removed from the list for a variety of other reasons.

After the first letter had been mailed, a further group was identified of 4,514 Danes who owned property in Sweden. This group of people also received a letter requesting that they take account of the information received from Sweden. However, this group did not receive the letter until October 2007, by which time the deadline for declarations for the tax year 2006 had passed.

The criterion for the inclusion of people on the two lists of 7,798 and 4,514 Danes had been entirely one of identification of property owners by computer processing. There had thus been no assessment in the selection procedure of the reality of the situation or of the probability of people owning property. The groups selected from the total population of property-owners provided by Sweden can therefore be assumed to represent random samples of that population. The two groups of 5,227 and 4,514 people compared below are also made up exclusively of Danes who had not declared ownership of property in Sweden for the tax year 2005. The characteristics of the two groups can thus be taken as being identical.

As the inclusion of any given taxpayer in the first or the second group may also be considered to have been completely random, the group who received the later letter can reasonably be used as a control group for comparison with the group who received letters in the first quarter of 2007. It may be assumed that each group had received equal amounts of input from the media and other sources.

Table 2. Division of treatment and control groups according to whether a declaration of property in Sweden had been made for the tax year 2006 by 5 November 2007.

	Number of individuals	Declaration made	No declaration made
Treatment group: letter sent in Q1, 2007	5,227	2,337	2,890
Control group: letter sent in October 2007	4,514	455	4,059

Source: Extract from Danish tax declaration data, 5 November 2007.

Table 2 shows that as of 5 November 2007 there were 2,337 people from the treatment group, equivalent to 45% of the group, who had declared ownership of a property in Sweden for the tax year 2006. In comparison, there were only 455 people from the control group, equivalent to 10% of that group, who had declared ownership of property in Sweden by the same date. This control group, it will be remembered, received their letters after the deadline for tax declarations had passed. It is thus evident that a significantly greater number of

Danes declare overseas property if they are aware that SKAT already has the information.

It is thus possible to identify a clearly statistically significant relationship between the fact that a person received a letter in the first quarter of the year, i.e. before the deadline for declarations for 2006, and the extent to which there was a subsequent declaration of property owned in Sweden. In other words, it is possible to demonstrate a clear causal relationship between sending out the letters and owners declaring their property.

The tax base

The previous section presented an analysis of the effect of information being sent out in terms of the number of persons who declared that they owned overseas property. A similar analysis was made of the number of overseas properties that were declared, even if it was not possible to determine the exact number of separate properties.

This section will discuss the results of the campaign in terms of tax revenues. The property tax to be paid in Denmark on overseas properties is set at 1% of the taxable value.⁴ Double taxation agreements with a number of countries mean that tax paid overseas can be deducted from the property tax payable in Denmark. The calculation below should only be seen as an estimate of the actual revenue effects, since a number of factors will determine the actual future tax payments.

SKAT has calculated the totals of taxes collected in relation to property owned overseas. The data are presented in Table 3. An increase of around DKK 17 million can be observed from the year 2005 to the year 2006 in the property tax collected. As with the previous analysis, this increase cannot be entirely attributed to the campaign that was conducted, but if the increase is compared with the trends in previous years, it nevertheless provides a clear indication of the effect of the measures taken. The revenue increase was calculated in mid-November, at a time when a large proportion of the effect of sending the letters to the control group had not yet been registered. It can therefore be assumed that the increase would be significantly greater if measurements were repeated using more recent data.

Table 3. Property taxes collected in relation to overseas properties

Tax year	2002	2003	2004	2005	2006
Amount in thousands of DKK	9,134	10,562	13,142	19,699	36,616

In order to obtain an accurate picture of the tax revenue resulting from the campaign, and to evaluate the financial benefit of the campaign, it is necessary to

⁴ The taxable value is to some extent equivalent to the market value, but special conditions prevailing in Denmark mean that the relationship is not an exact one.

make an estimate in current money value of the future amounts of property tax that may be collected as a result of the campaign.

A calculation shows that the present value of the campaign could amount to around DKK 99 million if all other factors remain unchanged. It is assumed that the observed increase of DKK 17 million will be maintained for the next ten years before completely disappearing. That is to say, the calculation based on present value does not include any effects more than ten years into the future. It is assumed that the percentage of properties sold will continue at 5% per annum, which is the percentage of declared overseas properties that were sold in 2005.⁵ This means that we assume a reduction in revenue of 5% per year. The discount rate used is 4.184% – equivalent to the effective rate of interest on a ten-year government bond set up on 30 November 2007.

The calculations are based on the assumption that current tax rules continue to apply. If there are changes to the rules this will of course affect the calculations. This will also be the case if there are changes in the taxation rules in the countries where the properties are situated.

Regardless of exactly how much revenue is finally raised, it seems reasonable to conclude that there are clear indications that the campaign has had a significant impact on the amount of revenue. Over and above the direct effect on revenue from property taxes on overseas property, there should also be effects related to a number of other factors. Income from renting out overseas property will probably contribute to an increase in taxes paid. There will almost certainly be an increase in revenue from the taxation of the free use of holiday homes given to principal shareholders. Finally, there will be an increase in tax revenues from the taxation of any future profits resulting from sales. These forms of tax income are not included in the analysis, even though sales of properties have been taken into account through an assumed reduction in the stock of overseas properties by 5% annually. All in all, it is probable that the increase in revenues stated in present value will be significantly higher than the DKK 99 million indicated by the calculations described above. This probability is further increased by the fact that the observed revenue increase of DKK 17 million would probably be found to be significantly greater if it were based on more recent data.

It is estimated that between 20 and 30 person-years were used on the campaign. There can thus be no doubt that the project has more than paid for itself. At the same time, it is a good example of an initiative where a strategy using information distribution has opened up opportunities for the generation of new tax revenues. It is very doubtful whether the project would have been financially viable if it had involved making conventional audits on individuals.

⁵ Since we do not really know how many of the declared properties are sold before the next declaration, we assume that those who do not declare ownership of a property the following year have in fact sold the property. As stated in Footnote 2, 11,110 of the 11,700 people who declared an overseas property in 2005 did so again in 2006. That is to say, there were 590 people out of 11,700 who had “sold” their properties – equivalent to a sales percentage of 5.0%.

The extent to which the campaign will have a lasting effect cannot be calculated, but the effect on compliance with the rules will probably decrease steadily with time. On the other hand, once SKAT has received information about a specific overseas property, it will be difficult for the taxpayer to escape the fiscal consequences of ownership so long as that ownership endures. Consequently, once an overseas property has been declared, most owners will continue to declare it until it is sold. This argument is the reason that no future costs have been included in the calculations described above, since it surmised that the amount of DKK 99 million in present value can be realised without any significant further costs.

Conclusion

There are clear indications that as a whole, the campaign directed towards Danish owners of property overseas has resulted in more people declaring their overseas properties to SKAT, the Danish Tax and Customs Administration, in the tax year 2006 than in the tax year 2005. It is, however, difficult to establish with certainty the extent to which the various separate initiatives have individually contributed to the increase, or the degree to which the media comment in connection with the campaign has been a contributory factor. Similarly, it is not possible to calculate the extent to which the upswing in the economic cycle contributed to the increase.

A link can be demonstrated with great statistical certainty between the declaration of property in Sweden and the fact that owners were personally notified that SKAT was in possession of information about their ownership of the property.

No final analysis of the cost-effectiveness of the campaign has been carried out, but some calculations have been made of the estimated size of the increase in tax revenues the campaign can be expected to generate. These calculations show that for the tax year 2006, the increase in property tax revenue on overseas properties was in the order of DKK 17 million. Similarly, the increase in the number of declared properties cannot be shown with certainty to be solely ascribable to the campaign. The total increase in tax revenues measured at present value will probably be significantly greater than the estimated figure of DKK 99 million when factors such as the increase in tax on rental incomes, tax on the free use of holiday homes by principle shareholders and tax on the income from future sales are all taken into account.