

LONG-TERM EFFECTS OF PROPERTY TAX: THE CASE OF CROATIA

ABSTRACT

Property tax is probably one of the most controversial taxes announced in Croatia's recent history. There has not been a tax or government measure that has occupied so much media and public discourse with the exception of the introduction of VAT. Most of the discussion regarding the new tax was focused on the actual fiscal impact of the new tax, how it would be calculated, and what the overall fiscal impact would be. This paper, however, takes another approach and tries to determine the overall long-term effects of the new tax in terms of class separation and sociological impact. Particular focus is paid to the possible ghettoisation of Croatia cities. The paper creates a model which investigates how the new tax affects households' long-term consumption plans. If households cannot adjust their consumption due to the new taxation, they will be forced to sell their property and move into lower-value neighbourhoods. Over time, this process leads to large reclassification and regrouping of households depending on their income. The paper also investigates how the introduction of the new tax will affect the education system. Our model shows the new tax will have an adverse effect on the education system and quality of education in Croatia.

Key words: property tax, consumption, long-term effects

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1. Introduction

There has not been an economic event in recent years which has caused as much controversy, debate, and confrontation as the announcement of the introduction of the property tax in Croatia. Although property tax is a standard tax in most countries, and even though neighbouring countries to Croatia have the tax, a true property tax was never introduced in Croatia. The mere announcement of the property tax caused an economic blowout, even before any kind of official communication was issued regarding the structure and format of the taxation. Most of the reactions were negative simply because a new tax would increase the tax burden on the average household. Again, the negative reactions came even before the official announcement of the tax levy or tax form. The property tax was deemed a pariah even before it came to light in any form. The actual proposal made by the Ministry of Finance is reviewed in the second part of the paper.

Most of the comments regarding the fiscal tax were closely tied to the fiscal implications of the new tax: what the tax rate would be and what effect the new tax would have on the budget. There were many comments regarding the new tax; most were negative, but some were positive. The supporters of the taxation pointed out that the new taxation would provide further development of the property market and further definition of the tax code, while the opponents of the new taxation pointed out the inappropriateness of the tax in a country which is traditionally tied to property both for permanent living and for vacation houses. For a complete overview of the relevant issues and comments, see Švaljek (2012).

Apart from political bickering, there were several lucid questions regarding the new tax, such as how the tax would be executed, what the tax basis would be, and how the changes in property prices would influence the tax. Basic and important questions arose, such as whether property ownership records are reliable, whether the tax would only encompass property or any form of potential property surface such as land, whether the tax would only include the building or also the whole property, how the value of the property would be determined, and on what time basis the property would be re-evaluated. Perhaps the most important question was regarding how the tax would be collected when property ownership is not clearly defined.

Once the property tax was presented, it was presented as a new taxation, but without an increase in actual tax burden. The Ministry of Finance presented the tax as two separate forms of taxation. The first form of taxation should be a residential property tax levied on properties actively used (year round) as living residences. These properties would be taxed at a much lower rate. In the case of living residences, property tax should, in terms of actual tax cost, simply replace the existing utility taxation charged by local municipalities. The property tax for living residences was presented as a form of tax format substitution, where one tax replaces several already existing taxes so there is no change in the actual amount of money the household has to pay. The second form of property tax functions more as a property tax and it is levied on property not actively used for living year round. This second form of taxation is not tax neutral and it would introduce new expenses for the taxpayer. This paper will show that both taxes would have long-term ramifications.

The Ministry of Finance presented the second form of taxation as a measure to increase the rate of utilisation of property that is in use for only several months a year. The

presentation of the new taxation pointed out that vacation homes used for only several weeks a year are not economically efficient and could be used for some form of economic activity such as being rented. One of the objects of the new taxation is to create a negative tax incentive for vacation home owners and to push them in the direction of economic utilisation of the dormant vacation homes. The Ministry of Finance hoped the new tax would provide an incentive to home owners to take house and property ownership more seriously.

The questions posed regarding the format and the structure of the tax are economically relevant. The impact of new taxation on the fiscal budget is also relevant. The objective of using tax in order to stimulate economic activity in the form of property renting is also relevant. All of the above issues present valid paths of economic research, but are not the objective of this paper. The objective of this paper is not to be part of the debate regarding the fiscal effects or to focus on the structure of the new taxation. In the authors' view, the most important effect of the introduction of the property tax in Croatia is the long-term effect on the restructuring of neighbourhoods based on income.

The main objective of the paper is to see how the introduction of a new tax (in our case property tax) would influence the Croatian economy, where there is a large disproportion between the wealth and income of a household. The central point of the paper is the importance and the economic factor of wealth and its juxtaposition with income. No one is disputing that the ownership of a house is a form of wealth, but what is important is the actual monetary effect of this form of wealth.

In most economic models households can save and these savings are in the form of bank deposits or government bonds. However, both government bonds and bank savings are forms of monetary savings and have high degrees of liquidity. They also have the ability to provide income in the form of capital returns or interest. On the other hand, full ownership of a house is a form of savings, but it is not a monetary, highly liquid form of savings. This is precisely the argument which brings to light the fallacy of making the 'dormant property' economically viable.

Because of the discrepancy between the monetary wealth, income, and real wealth, the introduction of the property tax will be much more far-reaching than originally envisioned by the Ministry of Finance. The initial assumption presented by the Ministry is that the property tax will have very small liquidity effect; however, this paper will show that this is not the case. Precisely because of the liquidity implication of the property tax, that is, taxation of real economic wealth not monetary wealth, the effects of the new tax will be different than those envisioned by the Ministry of Finance.

For the purposes of this paper, we will separate monetary wealth such as cash, savings, equity, or other forms of monetary securities from real wealth such as property ownership. The main objective of this paper is to investigate how the introduction of taxation of real wealth would change the economic choices of households.

The analysis will be split into two parts. First we analyse how with the new tax would affect households and their decision-making process once the tax is introduced. The second part of the analysis will be focused on the long-term implications of the introduction of the new tax.

Section 2 serves as an overview of the proposed tax. Section 3 presents a literature review. Section 4 details the mathematical model. Sections 5, 6, and 7 analyse various

aspects of the proposed taxation and the long-term impacts of the new tax. Section 8 concludes.

2. Proposed property tax overview

In this part we present an overview of property tax in Croatia.² The Croatian Ministry of Finance is the government body that proposed the new tax. In November 2012 the general concept of the property tax was presented to the public. The presentation explained how the tax should function in practice and there were some examples of the calculation of the actual cost of the new tax.

The objective of the property tax was to decrease the cost of labour and to serve as a mechanism of decentralisation of Croatia. The actual implementation of the tax would be in several phases. In the first phase there would be a redistribution of the tax burden from the taxation of labour to the taxation of property through the introduction of the property tax and the abolishment of the municipal taxation and the abolishment of the existing tax which exists on vacation homes. In the second stage of the implementation of the taxation, the importance of local government and the economic role of the municipalities would be increased. The local government would have more power and be more able to influence the local quality of life. The role of local government and the number of services provided by the local government would be increased based on the slogan 'local taxation for local needs'. The third stage would implement final abolishment of all extra-fiscal and para-fiscal burdens imposed by the municipalities.

The way the property tax was presented clearly shows that the new tax does not have the purpose of increasing taxation or increasing fiscal revenues. The new tax would not be used to serve as a measure to decrease the fiscal deficit. The property tax was presented as taxation which would be an exclusively local tax with the sole purpose of giving more opportunities to local governments to pursue local projects. It was also pointed out several times in the presentation that the new taxation is not a new tax burden, but is ultimately a decrease in taxation. This claim was based on the assumption that in the third phase of the implementation of the tax other forms of municipal taxation would be abolished. Some calculations regarding the actual tax levy were also given in the presentation, but the actual cost of the new taxation was presented as a range in the form of 'x to y kuna'. Because of the way it was presented, it was hard to conclude what the actual net impact of the new tax would be.

The actual calculation of the taxation should be in the following form. First the property would be evaluated through a mass appraisal. Based on this evaluation, the basis for the tax would be 70% of the estimated value of the property if it is used for permanent residence. The deductible could be extended from 88% to 90% if a municipality chooses to do so. The deductible for occasional living would be from 70% to 85%, again based on the decision of the municipality. Property which is used for business can have a deductible in the brackets of 80%, 60%, 40%, and 20%, again based on the decision of the municipality.

² Full presentation can be found at

http://magazin.nekretnine.net/resources/files/nekretnine/documents/articles/Porez_na_nekretnine.pdf

If we exclude questions regarding the calculation of property tax for the purposes of this paper, the most interesting items of the property tax are the initial value of the property estimated for the purposes of the property tax and what deductible the local municipalities would use.

The new tax would be based on the value of the property object which is subject to taxation. This in itself implies the amount of tax collected would be proportional to the values of the property in a certain area. The higher the estimated value of the property, the higher the tax collections would be. The smaller the property value, the smaller the tax collections would be. Although the last two sentences might seem self-evident, they are the basis for the mathematical model we are going to develop in Section 4 of this paper.

Based on the current proposal, the tax municipalities would have the power to determine the tax deductible. In this case, it is possible for the actual tax burden to be significantly different in municipalities that have the same property values or for there to be the same tax burden in municipalities that have significantly different property values. This possibility leaves room for the tax to have an income or wealth effect on the households. The households can be indifferent between the municipalities, regardless of whether the property values. Or the households can have a strong preference towards a certain municipality, even if the value of the property were the same. This leaves room to create a neutral tax impact there the actual amount of taxation is the same. The municipalities with lower property values would have a smaller deductible (higher total tax), versus municipalities with higher property values that would have a larger deductible; in the end, the total amount of taxes paid would be the same. If the end form of the tax were constructed in such a way, then the whole argument of this paper would be moot; however, as we will show, this is probably not the case.

3. Literature overview

In Croatia there are several seminal papers which deal with the problems of tax reform, the best example of which is probably Santini (2009), who proposed a complete tax code overhaul. The specific literature about the property tax is smaller, although there are several papers that have dealt with this issue, such as that by Tica (2011).

Kukić and Švaljek (2012) give a comprehensive overview of the modern understanding of the property tax. The authors describe the goals of property tax and the arguments for and against the introduction of property tax into a tax structure. Their paper also describes the impact of the property tax on total fiscal revenues in EU countries. The authors also provide recommendations for the introduction of property tax in Croatia. Lovrinčević (2011) gives an overview of the property tax in EU countries and recommendations for the introduction of the property tax in Croatia. Most of the papers written about the property tax in Croatia and the introduction of the property tax in Croatia are interested in the structure of the new tax, how it will be calculated, and what fiscal impact the new tax will have. Neither the economic nor the non-economic long-term impacts of the tax are part of the Croatian research on this topic. This is another research gap this paper aims to fill.

In case of the USA, research on property and property tax is comprehensive and has a long history. For our purposes, a significant paper was written by Ladd and Bradbury

(1987), who researched the connection between property tax and the tax basis in the case of 86 large counties in the USA. They found that an increase in the property tax by 10% decreased the tax basis for the property tax by 1.5%. The impact of the property tax was much larger than previously thought and the impact of the tax on property values was also much larger than expected. Apart from decreasing property values, the property tax also reduced total economic activity in the areas where there was a tax increase. The paper also found that the largest tax rates were in the largest and the smallest cities analysed. This conclusion is especially significant in the case of Croatia. In the previous section we mentioned that there is a problem regarding how much of the tax would actually be paid by an average household and what the difference would be in the average tax paid between cities.

Johnson and Walsh (2007) also investigate other economic and non-economic impacts of property tax that are significant and applicable when it is introduced. This is particularly relevant for policy consideration in Croatia. The paper also investigates what the impact of the property tax is on public services, which should be financed through the property tax. As expected, crime decreases property values, but increases in public services increase property values. The paper also raises the question of whether areas with larger property values can demand higher levels of public goods due to the higher taxes paid.

An opposite view can be found in a paper by Glaeser (1996), who points out that a high property tax is in fact a positive indicator, since higher property tax implies higher property values and therefore more leisurely living and a higher quality of life. A higher quality of life in a certain area indicates higher property demand. Higher property demand increases property prices and therefore *ceteris paribus* provides higher property tax income. Therefore, introducing a property tax can provide an incentive for higher quality of living if the tax income is used in fact to increase quality of life in a certain area. The author also points out that there is another benefit from property income, which is that property values can be incorporated into expectations and this can serve as a corrective mechanism against myopic politicians.

Glaeser (1996) also introduces the elasticity of property supply and demand. When property demand is inelastic (smaller than 1), the improvement in the quality of life is reflected in the increase in property values. The traditional assumption is that property value elasticity should be smaller than 1. The author points out that total tax income will decrease when the elasticity of the property demand is larger than 1. When the demand for property is sufficiently inelastic, increasing the property tax will increase the quality of life for a household, but it will decrease the total amount of taxes collected.

In their research, Johnson and Walsh (2013) use the Tiebout model in which the individuals 'vote with their feet' and choose the location in a district that can best satisfy their fiscal preferences. This paper points out that the choice of location for voters is sensitive to changes in taxes. The authors use the market for vacation homes in Michigan and determine the connection between the number of houses and the tax rates. Although the vacation property owners do not have a direct effect on local elections, their presence has an impact on the tax rate. The larger the number of vacation homes, the smaller the tax burden on local year-round residents who do have the voting power.

4. Model

In this part of the paper we present our model. It is a standard economic model based on time optimising households. The model will be split into several cases in order to analyse what happens when the households gain significant wealth from ownership of a house. Unlike other models, we are focused on the cash flow for households, not necessarily what their behaviour is under certain economic conditions.

4.1. Basic model

First we are going to set up a baseline scenario, a case when the property tax does not exist. In this baseline model, the fact that the household owns a house does not affect their consumption choices or level of disposable income over time.

We shall assume the households start with initial wealth W . This wealth is property on which the household does not generate any income. We shall also assume that this property is mortgage free and in full ownership of the household. The household generates income through wage w and income based on savings, which it gets from the bank. The savings will be denoted as S and the rate on savings will be denoted as r . Therefore, the income (I) of the household in any given period is:

1.
$$I = w^e + rS_{t-1}$$

Since we are not interested in the effects of the interest rate on households, we shall assume the interest rate is fixed for all periods. The wage is not fixed and t is stochastic. The wage changes over time based on a simple autoregression:

2.
$$w_t = \alpha w_{t-1} + \varepsilon$$

where ε has the distribution $N(0, \sigma)$. The household's use of funds can also be viewed as the use of liquid funds. As in standard models, we assume there are two ways the household can use the funds: consumption or savings. So the expenditure EX equation is:

3.
$$EX = c^e + s^e$$

As funds used have to be equal funds received, we can derive the household's budget constraints:

4.
$$c^e = w^e + rS_{t-1} - s$$

Over time savings are accumulated based on the following equation:

$$5. \quad S_t = \sum_0^{t-1} s_i (1+r)^{t-i}$$

For mathematical simplicity, we do not allow the households to liquidate previously accumulated savings. The utility function is also given in the standard form:

$$6. \quad u(c) = \frac{c^{1-\gamma}}{1-\gamma}$$

Over time the household tries to solve the following maximisation problem:

$$7. \quad V(A) = \max E \left\{ \sum_t^\infty \beta^i \frac{c^{1-\gamma}}{1-\gamma} \right\}$$

where E is expectations and β is a discount factor with values $0 < \beta < 1$. Considering the utility function and budget constraints, the Bellman equation for the household is:

$$8. \quad V(A) = \max_c \left\{ \frac{c^{1-\gamma}}{1-\gamma} + E\beta \left\{ \sum_t^\infty \beta^i \frac{(w+rS_{t-1}-s)^{1-\gamma}}{1-\gamma} \right\} \right\}$$

Using dynamic programming, the household solves the Bellman equation given the budget constraints. In this model, the wealth of the household coming from the property is not present in the optimisation problem.

4.2. Model with the property tax

We shall now move forward and look at a model where a household is impacted by the ownership of a property. In this model the household again does not generate any income from property ownership. As in the previous model, the income of the household remains the same:

$$I = w^e + rS_{t-1}$$

The household expenditure from the previous model has to be augmented for the property tax t . The total amount the household has to pay is tW , where W is as previously stated the value of the property the household owns. Therefore, the new household expenditure equation is:

9.
$$EX = c^e + s + tW$$

As we can see, the expenditure portion has now increased for the value of the tax. What is important to note is that unlike other taxes such as value added tax or taxes on income, there is no relation between income and property tax. This is an important point we will analyse later. When we equalise income and expenditure, we get the following new budget constraint:

10.
$$c^e = w^e + rS_{t-1} - s - tW$$

In this new budget constraint, the household will have to decrease consumption in order to pay for the tax. Just as in the previous model, the household tries to solve the Bellman equation for the problem, which now has the following form:

11.
$$V(A) = \max_c \left\{ \frac{c^{1-\gamma}}{1-\gamma} + E\beta \left\{ \sum_t \beta^i \frac{(w+rS_{t-1}-s-tW)^{1-\gamma}}{1-\gamma} \right\} \right\}$$

The new Bellman equation includes the property tax. The effects of the property tax are the same as with any other tax: the household has less disposable income for other economic activities.

4.3. Model with the sale of the property

The previous model presented us with the introduction of property tax into a household's budget constraints. The model in the previous section simply assumed that the household decreases consumption and then uses the funds from their decreased consumption to fund payments for the new tax. The model in this section is going to investigate a fringe case when the new tax causes such a decrease in the household's consumption that the household is forced to sell the property. Let us look again at the budget constraints from the second model when the property tax is introduced:

12.
$$c^e = w^e + rS_{t-1} - s - tW$$

Clearly there is a mathematical possibility that $w < tW$. In this case, the household cannot pay the property tax because the value of the tax is more than the value of the wages the household receives and the income from the interest on savings. In this particular case, the household has to sell the property.

The case in which the household sells the property in our model will function as follows. The household sells the property and then purchases a new property that has a smaller

value. In this way, the household maintains ownership of a property, albeit at a lower value, and decreases the property tax the household has to pay. This particular case will split the wealth of the household. There will still be wealth in the form of property, but there will also be a portion of wealth now in liquid money. We shall assume that the household transfers the remaining funds from the sale of the property into savings.

As before, we have a value of property wealth W at time t . When the household sells the property, the wealth W in time period $t + 1$ will be split as:

$$13. \quad W_{t+1} = W'_t + s^w$$

As we can see, the wealth which was only in the property is now split into W' , which is the value of the new property purchased by the household, and s^w , which are the new savings from the remaining proceeds of the sale of the initial property W . Therefore, the new total savings after the sale of the property will be:

$$14. \quad S_{t+1} = \sum_0^t (1+r)^i s_i + s_t^w$$

In this particular case, the household was able to increase its income-generating wealth by selling the expensive property and purchasing a lower value property. The extra money was used for savings, which generate income through interest.

4.4. The difference between the three models

Now we have created our three models, we can show how the property tax affects households. In the first model we have a time optimising household that plans their consumption path over time. In the second model, we have a household that is burdened by the increase in taxes on non-liquid and non-income-generating assets. The third model shows how a household can permanently increase their consumption by selling their property and increasing their savings. The second and the third model are only pertinent in cases when the households are faced with the introduction of a new property tax.

At first glance, the third model might seem to be an ideal model: it allows for a household to have a permanent increase in consumption through the sale of assets, because the household can turn non-income-generating assets into income-generating assets. In spite of the appeal of the third model, the implications are much greater than just the increase in the household's consumption. As a matter of fact, the third model is the one which we are going to analyse further.

Apart from the obvious constraints in terms of the liquidity of the property market, which has less liquidity than other durable assets, especially in a small country like Croatia, the main problem with the third model and the introduction of the property taxation is not the liquidity constraints of the market, but the long-term demographic and social implications of the taxation. The main problem with the introduction of the property tax is the fact that the household has to pay a tax on wealth which is not liquid.

This is the main difference between property tax and other taxes such as income, value added, or capital gains tax. The household is forced to pay taxes on past income. As pointed out in Santini (2009), this includes people who saved in order to build a house or buy a property. The household has already paid income tax before it purchased a property; there is no need to tax the household again.

5. Demographic implications

The introduction of the property tax has been presented so far as a tax which only has fiscal implications. The main idea of the property tax in Croatia is to increase the responsibility of the local government for the development of the municipalities. At first, this looks like a positive way to decentralise the government and fiscal system.

In the Ministry of Finance presentation of the new tax, the main purpose and implication of the tax is clearly stated: 'local tax for local needs'. It is also stated that local taxation implies funding for local schools, however precisely the mathematical sign of equality (local tax = local needs) will be the source of the long-term inequality.

We are now going to conduct a detailed analysis of what local tax implies for local schools. Schools would be funded from the property tax, which implies that neighbourhoods with higher property values would have more money for their local schools. Over time this would put children from neighbourhoods with higher property values at an advantage versus kids from neighbourhoods with lower property values. There will be a clear grouping of population based on class structure, with the value of the property at the foundation of the class bracket.

Although there is initially a partial class separation between households in the model, the class differences are not necessarily manifested in the ownership of property. The main reason for this is the legacy of socialism, which in itself did not allow large class differences. After the introduction of the market economy class differences increased, but total class separation has been gradual and over time. With the introduction of the property tax, the class separation would significantly pick up speed and would also introduce a demographic impact on the population.

We can now go back to the goal of 'local tax for local schools'. With the introduction of the property tax, class separation would increase, but not based on the incomes of the individual households, but on the market value of their assets. Each part of the town would become a clear definition of a particular social class. Of course higher class areas would have higher property values. Higher property values would lead to higher property taxation; higher property taxation would naturally lead to more money for local schools; more money for particular schools also means schools would have more resources to devote towards the education of their students. Following his logic through, it is clear that the best schools would be in the neighbourhoods with higher property values.

6. Intra- and inter-group separation

The counterargument for our analysis can be split between inter- and intra-group analysis. By intra-group we mean how the introduction of the tax would influence the neighbourhood in a particular town. By inter-group we mean how the introduction of the tax would influence the development of particular towns. We will start with the counterargument to how the tax would influence the development of particular neighbourhoods in one town. The main counterargument is that a particular town in Croatia is considered a town as a whole and that a particular neighbourhood could not receive more income from property tax. As a new tax would be a levy on all neighbourhoods in a town, even though different neighbourhoods have different property values, the ones with higher property values would have to pay more. But the income would be evenly divided between all users of the funds, that is, every neighbourhood would receive the same amount of money. However, this argument is false. If this is true, then why do large towns have different quality of life, crime rates, and other characteristics in different neighbourhoods? If this is true, then every neighbourhood in New York or Chicago would have equal quality schools. However that does not mean it is impossible to have equally good schools in a large town.

The intra-group problem with this tax would be also reflected between towns. The way the tax is organised means that larger, more affluent towns would have more funds for municipal projects, while towns with less funds will have fewer abilities for progress and development. In a small country like Croatia, where there are towns with large concentrations of population, it is clear that larger towns will on average have larger property values and that they would be able to collect more funds from the property tax in both absolute and relative terms.

It is precisely because of this that the introduction of the new tax would have an adverse effect on smaller towns, causing the differences in quality of life to greatly increase between smaller and larger towns. Since there are large differences in terms of property values, the tax mantra of 'local tax for local schools' is more of a verdict than a motto for the introduction a new tax.

The implications on the overall quality of life are more than clear. Smaller, less wealthy towns with lower property values would have a lower quality of education. For some rural areas, this would be detrimental and it would lead to the extinction of some towns. However, there are small towns which would prosper because of this new tax, specifically towns with high property values such as seaside towns and islands, which due to tourist demand have uncommonly high property values. Clearly this new tax would have adverse effects on the population of certain areas of Croatia.

7. Fiscal implications

In order to avoid the separation which was presented in Section 6 of this paper, the property tax has to be revenue neutral. The introduction of the new tax has to be nothing more than a tax substitution from one levy to another: a household will not pay a municipal tax, but a property tax instead. This has to have zero net change in the

overall tax burden of the households. However, if we accept the introduction of the new tax *a priori* there are several issues in terms of the neutrality of the tax.

The first neutrality is that a household has to pay exactly the same amount of tax, regardless of the name of the tax. This clearly implies that the tax has to stay the same for a particular household regardless of the location and the value of the property. This neutrality is impossible to achieve in practice and it is easy to demonstrate this impossibility. Let us assume the following case: $W_A > W_B$, the value of property A is greater than the value of property B, but the size of the property is the same and we can also assume the two properties are next to each other. For the tax to be neutral, we have to have the following equality: $t_A W_A = t_B W_B$, tax collected from property A has to be the same as the tax collected from property B.

In actual practice, this type of neutrality can be achieved under two conditions. The first condition is to have the maximum amount that can be paid for a property tax, regardless of the value of the property. This will determine the upper level of taxation. The second is to increase the deductible for the higher value property so that the higher value property pays less tax considering the value of the property. This neutrality can be achieved, but doing so would only increase the negative implications of the tax that are discussed above. This would impact households that have low incomes but high property values the most. If the government decided to implement this type of neutrality, the property changes due to the sale of property which we have described would only appear faster. This type of neutrality also demands a tax to be regressive, which in itself will have the effect that richer people (regardless of whether this is due to large income or large property value) will pay less tax. This is contradictory to the main objective of the tax.

The second form of neutrality is that a household pays the new property tax, but the overall tax burden of the household is the same. This neutrality we will call consumption neutrality, because the household has the same available income after the introduction of the tax. In our model the main source of income for the household is wages and the main shock to their consumption is the new tax. If the government would like to achieve this type of neutrality, the government would have to introduce some tax incentives to decrease other taxes paid by the household so that the overall available income of the household remains the same after the introduction of the new tax. However, this clearly implies that the federal government would have to have a decrease in tax revenue, because the property tax is a municipal tax. In the end, in order to achieve this neutrality the government would have to introduce two tax reforms: the property tax and the new tax incentives at the federal level.

In the tax proposal it is clearly stated that the new tax is only new in name and that it should replace utility charges. If we analyse the first stage of the implementation of the new tax, it is truly neutral. However, the second and the third phase of the implementation of the new tax are clearly not neutral and show that there would be an increase in the overall tax burden. From the presentation it is not clearly shown whether the 'tax swap' would be an increase or a decrease in the overall tax burden.

Considering that the property tax is not neutral (especially in the second and third stage of implementation), a household with smaller income but high property value will be clearly affected by the new tax. In order to introduce a measure of social responsibility, the government would have to introduce tax incentives for those kinds of households. However, the introduction of the tax incentives would have a negative effect on both the

central and local government's budget. The main question from all this analysis is: What is the point of the new tax if all it does is create a reshuffling between central and local government? There are easier ways to increase the municipalities' income than by creating a new complex tax structure.

What we have presented in this part of the paper is that the property tax is not neutral and if the government wants to achieve any form of neutrality for the new tax it will have to introduce new changes in the tax code. The property tax was initially presented as a neutral tax, but it is clear that this tax is not neutral. The moment the new tax is introduced all of the adverse effects of the new tax which were described in this paper will come into full effect. The main problem with this tax is the fact that the tax is on non-income property and that the property value can be significantly different from the income of the household.

8. Conclusions

The main object of this paper was to demonstrate the possible long-term sociological and demographic effects of the introduction of a property tax in Croatia. Although most of the arguments regarding the introduction of the property tax have focused on the fiscal aspects of the tax, our paper has shown that there are broader implications and consequences of the property tax which have to be fully analysed.

The model we have presented in this paper shows that the introduction of this new tax will create class differences and disintegration of social cohesion. This will occur because towns will be separated between those that are rich and those that are poor. However, this separation will not occur only between towns, but also within towns because different neighbourhoods will be able to collect more tax revenue. Based on our model, the introduction of the property tax would not be helpful for a local community nor would it give more power to a particular municipality or lead towards the general decentralisation of Croatia. As a matter of fact, we clearly show that the new tax would have exactly the opposite effect. The new property tax has been revealed as a tool that would force high net worth but low liquidity households to liquidate their properties and move to neighbourhoods with their particular revenue. Although this is not necessarily a bad thing, it would ultimately create significant intellectual and sociological stratification in Croatia.

The biggest issue with the introduction of the new tax is the claim that this new tax would be able to provide better education for a municipality. As our analysis has shown, this is exactly the worst effect of the introduction of the property tax. Forcing the municipalities to fund schools directly through property tax predestines municipalities with lower property values to have worse education.

Although the Ministry of Finance had good intentions when it introduced the idea of this tax, it is clear that there are aspects of the new tax which have not been subject to proper analysis and it is precisely because of this that the tax has to be examined in terms of its larger implications.

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