#### Tax Policy to Treat the Housing Crisis in Algeria : The Potential Impacts of Taxation on the Housing Market

TayebToufik, DAHAR The University of Algiers /Doctoral School on State and Public Institutions Benaknon, Algiers, Algeria t.tayyeb@univ-alger.dz

Khaled , SENATOR Master degree,University of Tsukuba,Japan, KDI School of Public Policy and Management, Republic of Korea senator.khaled@kdis.ac.kr

#### ABSTRACT

Since its independence in 1962, Algeria has recognized a deep housing crisis despite the multiples policies adopted by the government. These policies were based on a quantitative approach and consists on increasing the supply side by offering millions of houses units using public funds coming mainly from oil & gas exportation.

The official statistics confirms that the total number of houses units (supply side) is more than the total number of households (demand side) by more than one million units, which proofs that the crisis is a related much more to the distribution problem. Therefore, instead of focusing on building new houses, we suggest the government to change the incorrect behaviors of using houses for wealth storage, speculation, and renting. Consequently, it should reinforce old taxes on real-estate and create new ones for double properties to affect the behaviors in such a way to make it on the interest of everyone to keep only one unique house to avoid the heavy taxes and the additional charges.

#### **KEYWORDS**

Housing, taxation, real-estate, property, owner-occupied houses, new taxation system

## RÉSUMÉ

L'Algérie a connu durant un demi-siècle après son indépendance une crise aiguë en matière de logement que les gouvernements successifs n'ont pas pu résoudre parce qu'ils considéraient qu'elle était engendrée par la non-disponibilité d'un nombre suffisant de logements. Or, les statistiques officielles montrent que le nombre de logements disponibles dépasse le nombre de foyers d'environ un (01) million d'unités, ce qui montre bien que la raison de la crise ne réside pas là.

La solution ne doit donc pas être d'ordre quantitatif ; il faut plutôt œuvrer pour changer les modes de consommation qui favorisent la thésaurisation et la spéculation sur le logement pour mettre fin à la rente tirée de la location.

Dans cette perspective, l'imposition de taxes supplémentaires fera que les personnes auront intérêt à se suffire d'un seul logement et à se défaire le plus rapidement possible de leurs autres propriétés pour éviter les charges fiscales qui s'y rapportent.

## **MOTS CLÉS**

Logement, fiscalité, immobilier, foncier, taxe sur les propriétés, imposition des logements occupés par leurs propriétaires. Tax Policy to Treat the Housing Crisis in Algeria : The Potential Impacts of Taxation on the Housing Market

## الملخص

الضر ائب الثقيلة والرسوم الإضافية

عرفت الجزائر منذ استقلالها في عام 1962 أزمة سكن عميقة، بالرغم من السياسات المتعددة التي اعتمدتها الحكومة. لطالما استندت هذه السياسات إلى مقاربة كمية لزيادة جانب العرض عن طريق توفير ملايين الوحدات السكنية باستخدام تمويل عمومي يأتي أساسا من واردات النفط والغاز. تؤكد الإحصائيات الرسمية أن العدد الإجمالي لوحدات السكن (جانب العرض) يتجاوز العدد الإجمالي للأسر (جانب الطلب) بأكثر من مليون وحدة، وهو ما لذا ، فبدلاً من التركيز على بناء وحدات سكنية جديدة، تقترح هذه الدراسة على الحكومة تغيير السلوكيات الخاطئة لاستخدام المنازل لتخزين الثروة والمضاربة والتأجير. وبالتالي، ينبغي لها أن تعزز من جديد الضرائب العقارية القديمة وأن تنشئ ضرائب جديدة لمن يقوم بمضاعفة الممتلكات من أجل التأثير على السلوكيات بطريقة تجعل من مصلحة الجميع الاحتفاظ ببيت واحد فقط لتجنب

الكلمات المفتاحية السكن، الجباية، العقار، ضريبة الممتلكات، فرض الضرائب على السكنات المملوكة لأصحابها

#### 1 - Introduction

For the majority of households in Algeria, a housing career often takes the form of first renting when young, before trying to take advantage of State-subsidized housing (whatever the formula) as a young adult, trading-up to a row house when becoming parents and in need of more space, before taking another step on the housing ladder to a detached house when one can afford it as semiold, and potentially trading down again to a block house when in retirement. We can add to this the category of speculators who exploit more than housing (especially subsidized or even public rental housing), even in illegal ways, with the aim of storing wealth, money laundering or speculation to multiply gains. Impacting both the supply and the demand sides of housing markets, this study proceeds from the initial hypothesis that housing career structures might have profound implications on house prices.

According to Trond Arne Borgersen, who has focused most of his research on the study of housing market cycles: "The existence of housing careers brings heterogeneity into the housing market and is an argument in favor of applying a multimarket structure when analyzing market developments. A multimarket structure allows one to address idiosyncratic features of the housing market instead of just analyzing how changes in macroeconomic variables such as unemployment and interest rates impact housing markets. .... the interplay between market segments can be addressed, and – in relation to that – the impact of equity-induced up-trading for house prices. As the exposure to households entering and leaving the housing market differs between segments.". This study will take this view from the point of view of the primacy of the study of consumer tendencies within the framework of the real estate market in Algeria.

Other studies analyzed the impact of the differences in property tax rates (tax divided by value) by location on the commercial values, housing capital allocations, residential mobility and tax incidence. Jack Goodman argues: "Differences in tax rates across jurisdictions have also been found to matter. .... movements of capital and consumers among taxing jurisdictions will themselves alter local property values, with the equilibrium results determined by supply and demand elasticities in each jurisdiction." (Goodman 2006, 3), he assumed that the property tax differential between houses and apartments has implications for housing affordability. Thinking on the issue has evolved. For a long time, the standard view among economists was that the property tax was regressive. It was thought to operate as an excise tax on housing with the tax proportional to consumption. Because poor people spend a greater proportion of their current income on housing than those with high incomes do, the property tax, in this view, claimed a greater share of their income than it did for wealthy people (Fisher 2015).

Regarding the profound and different view of the housing market or housing crisis, this research tries to elicit reasons or explain possible solutions (In different contexts, such as the Algerian case). We look also to the issue from new dimensions that might lead us to think outside the box and link the main variable of the study (the housing crisis in Algeria) with new, unconventional variables such as tax policies, housing careers or consumer behaviour towards property ownership.

This paper considers how to move from a quantitative diagnostic and treatment approach to the housing crisis to a model that adopts new variables to influence the housing and the property market such as tax mechanisms. Thus, we attempt to present a policy-relevant strategy to build different perceptions of possible solutions. What is involved goes beyond the quantitative solutions that the Algerian Government has long adopted by delivering more housing units to shifting Government policies towards studying the nature of the market and consumer behavior and addressing its propensity to use housing to store wealth. How can the elements of a flexible and adaptable model of real estate tax policy, which considers the fundamental challenge of preventing various forms of property speculation and shaping new types of interactions and interdependence between tax and housing policies?

# 2 - Reality of the housing crisis in Algeria: permanent public subsidies and multiple policies adopted

The housing crisis is affected by many factors, including the macro-economic situation of the country that determines the supply side and the social behaviors of households that determines the demand side. In this section we aim to present the different public policies adopted since the independence and that show almost the same features: "increasing the number of houses units to fulfil the increasing demand". We will also refer to the official statistics to compare the evolution of the global number of houses units to the global number of houses units to the global number of houses units to the global number of houses units (supply side) is more than the number of households (demand side).

# 2.1 - The origin of the housing crisis: multiple policies to treat the same issue

According to C. Benakezouh, the historical evolution of the housing sector is an important factor that effects the current situation

of the sector in Algeria. He points that this evolution is related to the reality and the errors committed by public authorities since the independence and even during the colonial period (Benakezouh, 1974). Based on the same approach, we will try to detect the origins of the housing crisis following the chronological evolution of the public policies, which shows two main periods: the socialist period (1962-1988), followed by the current situation (1989-today).

# 2.1.1 - The socialist period (1962-1988): between the public monopoly of the housing sector, and the failure to achieve the announced objectives

During the very first years after the independence in 1962, there was an important rural migration (Zouzou, 2008) and (Guettali, 2010). The same situation did not change during the period 1966-1977, which coincided with the adoption of new economic policies of development based on heavy industries that marginalized the housing sector especially in rural areas<sup>1</sup>. Thus, the number of urbanized population jumped from 3.8 million to 6.7 million on 1977, which means a development by 77% (the growth of the urban population was 5.3%, comparing to the global population growth that was turning around 3.2%).

The available data shows that the demand on housing had increased, especially in the urbanized areas, not only because of the rural migration but also the rapid development of the global population. The urbanization rate jumped from 18% in 1954 to 45% in 1966, and it became 49.7% by the end 1987. However, the population was concentrated on the north zone (Algiers, Oran, Constantine and Annaba) that recognized a rapid development by more than 5.5% per year, comparing to the global development of the population that was turning around 3.1% per year (Benakezouh, 1974) and (Merbii, 1984).

The public choices on the real-estate sector were unclear until the beginning 1970s when the government has adopted several laws regulating the sector, especially the ordinance 74-26 relative to reserves of real-estate on municipalities (Ordinance 74-26, 1974). The doctrine adopted by the revolutionary government recognized housing providing not an objective itself but an instrument to achieve the aims of both the agriculture revolution (the socialist villages) and the industrial revolution (the urbanized areas). The participation of the private sector had been almost marginalized, limited on the agricultural cooperation and some personal houses.

<sup>1-</sup> It is worth mentioning that there were some policies to develop the rural areas under the agriculture revolution (1971) and the project of building 1000 socialist villages (1971)

Despite the official speech, the socialist system was not strictly respected after 1979, and the government had accepted some exceptions in term of the participation of the private investment on the housing sector and the real-estate promotion (Law 86-07, 1987).

The data confirms that socialist slogans or objectives relative to the housing sector did not achieve any of the declared objectives. From one side, the housing policy for the agricultural revolution failed to limit the rural migration, and from the second side, the slogan of housing policy on the service of the industrial revolution resulted the crisis of shanty town and squatter areas around the industrial zones that became afterward source of criminality and poverty.

# 2.1.2 - The current situation (1989-2018): trends to liberate the real-estate market and to find other mechanisms to finance the housing sector

The most remarkable changes on the housing policy have been introduced after the promulgation of the constitution of 1989 that has devoted the official abandonment of the socialist system, and thereafter has changed the nature and the magnitude of public interventions. Consequently, the government have adopted new mechanisms to finance the housing sector, which have produced some positives results on quantity, but its impact on the housing crisis itself was insignificant. The law 90-25 relative to the realestate orientation and the law 90-29 relative to the urban planning have devoted new principles relative to the liberation of real-estate market and housing transactions (Law 90-25, 1990).

Financing the housing sector has recognized some important evolutions. It passed from only two simple ways (rural and urban) to many other forms including the promotional houses and the social houses.

Concerning the social rental housing, it is a form of houses property of public sector, affected exclusively for disadvantaged persons and is financed directly or indirectly by public funds. Thus, the government determines periodically the renting amount for each area, which does not refer to the real cost, nor the real prices of the market, but it depends only to the purchasing power, and the nature of the house itself (e.g. number of rooms

The UN special rapport about the housing issue focus on the distribution problems to shed light on "the existence of a widespread black market for dwellings made available under two earlier programs. Housing units are alleged to have been assigned, bypassing the existing procedures, to ineligible persons, who then sublet or sell them at a high price, in violation of the law." (Rolnik, 2011). This conclusion confirms

that housing crisis exists not only because of the public financing crisis but also because of the distribution and the market limits, which is the subject of the next section.

# 2.2 - Quantitative analysis of the housing crisis: the lack on houses is not the unique problem

The different housing policies show that the Algerians governments dealt with this crisis as a quantitative issue, considering that there is a deep shortage on the supply side of the market. Thus, most policies adopted consists of creating millions of new units in order to achieve the equilibrium on the market. This coincides also with was the conclusion of the special report of the UN that insisted that *"the Government bases its policy exclusively on supply and on quantitative objectives set without any prior assessment of needs and without a specific strategy to address individual questions and problems. For example, for the five-year period 2010–2014, the Government undertook to build 2 million housing units, including 500,000 rental units, 300,000 units to replace substandard housing and 700,000 rural housing units, but to the UN Special Rapporteur's knowledge, this distribution is not based on an assessment of regional needs." (Rolnik, 2011).* 

It is worth noting here that in the case of Algeria, houses are mainly used by families and it is socially not accepted that single people live independently to their families in separated apartment, even there is general tendency to not rent apartment for single people. Exceptionally, some houses are turned to be used for professional activities, especially liberal activities (doctors, dentists, lawyers...)

The available statistics published by the National Office of Statistics shows that the total number of houses is 6.68 million units (regardless the nature of the houses themselves), while the total number of the household is 5.82 million families, and view the Algerian society features as explained above, it results that the difference (around one million units) is distributed between the secondary housings (0.42 million units) and the vacant housings (0.93 million units). This situation confirms that the lack on housing units is not the origin of the crisis, and the available houses are enough for the global households. The UN report confirms that "despite major housing construction over the past 10 years, the housing crisis continues. This is not only a question of the insufficient number of available housing units, but is also linked to various other factors which have contributed to the emergence of this complex, multifaceted problem." (Rolnik, 2011).

Despite the very large land of country (2.4 million Km<sup>2</sup>) and the very small overall population density that does not exceed 17 per Km<sup>2</sup>, prices of the building-lands are very high comparing to the

revenue of the most population. Yet, the easiest answer is that the distribution of the population is not equitable. The density is higher on the coast areas, then the haut-plateau and it decreases continuously until the Saharan areas that are almost uninhabited. However, the official statistics as presented on the table-1 show that the number of household is high on coast cities (e.g. Oran with 0.28 million households), but also on interior cities (e.g. Setif with 0.24 million households), and it decreases on the south areas.

The same statistics shows an important surplus on the housing units comparing to the total population in all regions. The unoccupied units (around one million) are based on the North region (59%), which is, in fact, the same areas where most public housing units are built or planned to be created in the coming few years. The program (2009-2014) planned to create more than 60% new houses on the urban areas, while rural areas benefits less than 40%, which is, in fact, against one of the State pillars to deal with the rural migration issue.

The dilemma is that these programs are not compatible with the growth of the population by geographical region, because data shows also that the growth of the population is 1.9% in the hautplateau, 2.4% in the South, and only 1.4% on the coast area, which confirms that the public choices are somehow encouraging rural migration, and it works to concentrate all the population in the North of the country.

| Table 1. number of houses comparing to the number of house-holds depending on the population distribution |                    |  |      |       |  |  |  |  |  |
|---|--------------------|--|------|-------|--|--|--|--|--|
|   | Urban<br>gathering | Semi-urban gath-<br>ering Rural gather |      | Total |  |  |  |  |  |
| Number of hous-<br>ing units  | 4.70               | 1,05                                   | 0,93 | 6,69  |  |  |  |  |  |
| Number of households  | 4,15               | 0,91                                   | 0,75 | 5,82  |  |  |  |  |  |
| Difference  | 0,55               | 0,14                                   | 0,18 | 0,87  |  |  |  |  |  |
| Source. (ONS, 2009)   |                    |  |      |       |  |  |  |  |  |

Finally, we conclude that the quantitative treatment of the housing crisis becomes a serious question regarding the objectives of the government, because the market is capable to absorb any quantity of housing units (housing trap). The classical relationship between the supply and the demand is not always correct when talking about the housing sector (Sullivan, 2014). The available data confirms that the nature of the crisis is not quantitative, but it is related more to distribution or to the public choices. Thus, the permanent increasing on the housing prices is not a consequence of the increasing on constructions costs, but it is a result of the "very high" price of lands (OECD, 2004), and the low cost of property.

#### 3 - Process to use taxation to treat the housing crisis : importance to control speculation to reduce of gap between the offer and the demand

This section aims to present tax instrument to treat the housing crisis in order to ensure a dwelling for every household. However, we will not take into consideration the problem of the very old houses, nor the quality of some new houses, and we will ignore the problem of inhabitable new social houses, and the cities made as dormitories (Tabboun, 2014).

### 3.1 - Taxation as instrument to control the demand side

Specialized studies recognize the direct impact of the tax policy on housing market (Hanna, et al., 2014). Tanzer has proved that any change in the tax rate result in equal change in the housing quality and quantity (Tanzer, 1985). Other studies suggest that eliminating taxes on any sector would result in a significant increase in the investment on these specified sectors (Bourassa, 1987).

According to S. C. Bourassa, increasing taxes on lands should have a liquidity effect and incentive effects. The liquidity effect is the most relevant to this paper, since it has two components: "one component is the effect on current landowners, who must bear increased holding costs and who are thereby encouraged to improve their properties or sell them to someone who will" (Bourassa, 1990).

On the other hand, many specialists focus on the importance of taxing owner-occupied housing in order to avoid any negative impact on investment or housing affordability. Evans suggests that "the theory demonstrates that the taxation of owner occupied housing should be at least as high as for any other form of investment, if not higher, and, especially it should, so far as possible, be tenure neutral as between renters and owner occupiers" (Evans, 2012). Therefore, low taxes on real-estate push prices to increase, which negatively affect underprivileged categories of the population (Philippe, 2005). Therefore, A. W. Evans believes that "the imputed income from housing should, at the least, be taxed at the same rate as the income from business capital… housing should not be exceptionally under taxed, but should, if anything, be taxed highly." (Evans, 2012)

Furthermore, increasing taxes on housing would help the government to orient efforts toward productive activities instead of the speculation on the real-estate (Matthew, et al., 2007). Because in many countries, the

# 3.1.1 - Taxation to control the behavior of buying houses for storing wealth, or for speculation

Speculation on houses causes scarcity of houses whatever the number of additional units entered the markets. Otherwise, since people expect that prices will increase they believe that acquiring real-estate means certain increasing of their future nominate assets, which cause what we will call in this paper: *the real-estate trap* (or the housing trap, inspired from the liquidity trap in the Keynesian analysis).

Therefore, the impact of increasing supply will be always very slow since people believe that real-estate is the best way to store wealth (International Union of Tenants, 2012), and to face the inflation negative effect (Hanna, et al., 2014).

On the other hand, speculation on houses is a serious issue that causes market recession, because every owner believes that prices would never decline, at least on the short run. Thus, they prefer to keep their properties waiting the prices to increase more to sell them (Dieci & Westerhoff, 2009) and (Boelhouwer, et al., 2004).

Houses are a necessary good, therefore, the government should intervene to organize the market to achieve at least two objectives: first, to discourage purchasing houses for unique objective to store wealth, the government should highly tax properties in order to push people to find other ways to use their wealth in productive activities (Rosengard, 2012). Second, to control the speculation, it should also highly tax transactions, in such way to leave consumers indifferent when deciding whether to buy or rent a home (Heywood & Hackett, 2013).

#### 3.1.2- Taxation to control the behavior of buying houses for rent

In addition to speculation, some people purchase houses for objective of civil renting to ensure a stable income, and this would serve also to limit the inflation negative effects on the capital with very small risk since it is just a temporary location.

It is also worth mentioning that in the case of Algeria similar to some other countries, there is some kind of inequality when talking about houses owner-occupiers of houses who are not subject to any tax on property revenues (Chote, et al., 2004). On contrary, when we compare to owners on the same situation who find themselves in obligation to rent their property and to look for rent for themselves because the nature of their work and children schooling, etc. they are asked to pay tax on property revenues although both situations are very similar.

To control those revenues, the government should expand the scope of income tax on revenues from properties to include counterfactual revenues of houses owners-occupiers, similarly to many other countries as Netherlands where houses owneroccupied are considered as having a source of income subject to tax on revenues (Kirker, et al., 2010).

#### 3.2 - Analysis of taxes on real-estate in the case of Algeria

Using taxation to solve the housing crisis is not a new issue. Taxes has been used in many countries to affect the consumers' behavior who are sensitive to any change on their revenues after tax resulted because of the change on the scope, the rate or the method of calculation (Augustyniak, et al., 2013), (Rosengard, 2012), (Mankiw, 2016), (Perloff, 2018) and (Reny & Jehle , 2011).

In fact, real-estates are subject to many taxes: property tax on real-estate properties, registration fees, global income tax (property revenues), and the annual tax on houses. This chapter is not for objective to explain the mechanisms of any of these taxes, but we aim to propose the best ways basing on the most successful practices in the world to reactivate these taxes in order to control houses property.

The official data shows that the property tax on real-estate is faraway to affect landlords' behaviors, at least when we take the frequency of updating rates and lands classification comparing to the evolution of urbanization. On contrary to other countries as Germany, where the law requires updates on rates and classifications every six years (Voss 2009). Data shows also that the global number of taxpayers is turning around 3 million including the undeveloped lands, despite the number of housing units is more than 6 million, which explain the high level of tax evasion. According to the most recent official statistics, property tax represents less than 0.60% of the total municipalities' resources, and there are more than 149 municipalities with zero resources coming from this tax, while in other countries, property tax is the main resource of municipalities.

The figure. 1 presents the evolution of the total amount of the property tax comparing to the evolution of the total number of new houses delivered on the same year. We can see that although the number of new houses increases considerably, but the property tax keep instable. Moreover, in 2013 and 2014 when the biggest number

of houses have been delivered, the amount of property tax declined dramatically. Although the complementary law of finances for 2015 has increased the basis and the rates of the property tax, but the total collected amount has decreased, which explains the importance of tax evasion. It is worth mentioning that this data represent only the houses delivered by the government and local authorities and did not include the houses built by individuals for their personal use or for real estate promotion.



Figure 1. Comparison between the evolution of the number of new houses

Note : The Total Amount of the Property Tax Includes All the 1541 Municipalities. Data is provided by, Ministry of Interior and Locales Authorities, 2020

The Total Number of Delivered Houses Includes All Categories of New Houses Delivered by the Government and the Local Authorities. Data is Provided by, Ministry of Housing, 2020

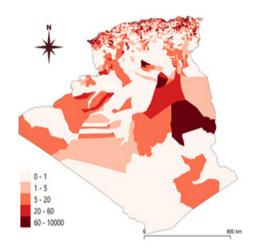
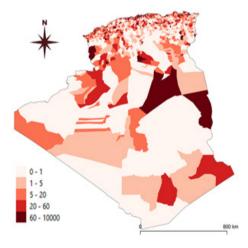
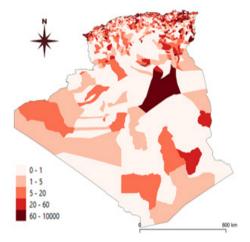


Figure 1. Evolution of the tax on real-estate properties before and after the adjustments of rates and scope in 2015

Panel 1. tax on real-estate properties in 2015

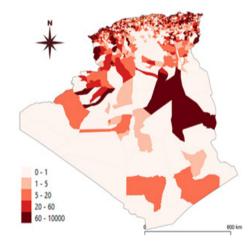
Panel 2. tax on real-estate properties in 2016





### Panel 3. tax on real-estate properties in 2017

Panel 4. tax on real-estate properties in 2018



## Data treated by QGIS. Source (Ministry of Interior and Locales

## Authorities, 2020)

The figure.1 about the evolution of the tax on real-estate properties before the adjustment of tax rates and scope and after that for the period 2015-2018, does not show any clear trend in term of the evolution of the tax collection. Otherwise, some regions recognized important evolution in a year, but for the second year, the collection declines again, except the coast area where the collection is almost always more important comparing to the other regions.

# 3.3- New tax mechanisms to reduce the gap between the supply and the demand in the housing market

We will devote this last part to give some practical proposal to encourage the government to use tax instruments to affect the behaviors on real-estate. We will try as much as possible to focus on the reality of things in the case of Algeria in order to avoid any ready or easy imported solutions that can never be achieved.

Yet, it is difficult for the tax administration to implanting any tax policy on real-estate is that people are occupying lends but still they do not have any property documents. This issue is beyond the capacities of the tax administration and indeed its cost will be very high regarding the very large lend of Algeria. However, basing on the principle of the independence of the tax law, the tax administration must control what is in the land, and it can issue taxes on the names of the people who are occupying the real-estate regardless of the property papers.

More importantly, it is important to distinguish the principal property of any household, and the first or the second secondary property and so on. A dwelling should be defined according to fixed referential superficies that is applied for every house and everybody according to the number of the family members. Otherwise, if the law defines the referential superficies for a family including only the couple (husband and wife) by 100 m<sup>2</sup>, with an additional referential superficies of 50 m<sup>2</sup> for every child, the supplementary area is considered as a secondary property subject to the second fraction of the property tax on real-estate properties (Leicester & Oldfield, 2004).

For objective to avoid any kind of property transfer between family members, the law should also devote the principle that children depend to their parents until the tax legal adulthood age (art. 6 of the law on direct taxes). Therefore, any property registered on the name of any member of the same family or considered under its control is always object to the legal dispositions relative to the secondary housing.

Based on the same principle, the tax on the principal property should be very low, and it may be a flat tax based on the area where the house is situated, or determined on the base of the rental value. However, the second property should support higher property tax that can be raised to the same level of the rental value. To persuade owners to transfer their properties, the property tax should be always in the same level or more than the rental value for the second and the third secondary property and it should increase so on. Otherwise, whatever is high the rental prices, the additional taxes should be higher, thus, everyone could not keep his secondary property unoccupied because he will be required pay the corresponding taxes anyway.

In fact, these measures are used in many countries as Denmark, which imposes a tax that is much more closely related to the value of housing, it levies a 1% tax on owners that is based on the housing market value (Leicester & Oldfield, 2004) In France, an additional tax on unoccupied habitations in areas that suffer housing crisis (Ministere de l'Economie, 2020).

The tax administration has already the database of all properties at the registration department, which will help to reduce the costs and to determine taxpayers. Moreover, "*individuals purchase housing only very infrequently over their lifetime makes it much easier for the government to obtain information on their personal purchases*" (Cremer & Gahvari, 1998). Thus, it is plausible to consider people that purchase frequently more than one property under the category of commercial activities that should support higher taxes.

To avoid any kind of speculation, we propose to use the US mechanism that consists on the possibility to benefit *once-in-a-lifetime* exclusion against taxable capital gains (Shan, 2008). Because in the case of Algeria, the abrogation of the global income tax (Capital gains on the transfer of buildings) during the period 2009-2017 did not achieve the declared objectives relative to reduce prices, and it has, in fact increased speculations on housings, especially those build using public assistances.

Concerning the problem of incorrect declarations to reduce registration fees, tax administration should cooperate with the national domain administration to enlarge the application of the preemption right, in order to avoid any declaration of incorrect values. Thus, it should find the necessary physical and legal instruments permitting an exact evaluation of the true renting value of houses, and to determine taxes according to the true price supported by the weak part (the renter).

Finally, we expect that adjusting property tax will help on the redistribution of the population, because tax rates should change according to the geographical areas and the rental value. Therefore, north populated areas, especially Algiers, should support higher taxes comparing to the rural and Saharan areas. Moreover, it will help also help on protecting the agricultural and forest areas that are in permanent decreasing because of urban expansion.

#### 4 - Conclusion

Taking some key characteristics of housing crisis in Algeria into account, this paper aims to analyze the Algeria housing policy via comparison of the different various policies pursued by the Algerian Government at various stages of the national economy, and through a quantitative analysis of a set of data that dropped the assumption that the number of housing units was the main source of the problem.

This paper attempt to analyze the causes and the consequences of the permanent increasing on the housing prices. We refer to the official statistics to proof that there is an important surplus on housing units comparing to the total number of households. Therefore, the public interventions via taxation could be an alternative mechanism to deal with this phenomenon.

The approach aims to control the behaviors of purchasing houses to store wealth, via increasing taxes on revenues from renting houses to push owners of more than one unit to transfer their properties to avoid the heavy corresponding taxes.

These answers are plausible despite the limits of the tax administration that would not research for tax assets because it is easy to control the tax asset on the real-estate and once its occupier is determined for the first time, he will be required pay the corresponding taxes since he does not proof the property transfer. Thereof, it becomes on the interest of every taxpayer to submit returns to the tax administration in case of any change of the situation to avoid additional taxes and penalties.

Nevertheless, this approach may encounter some obstacles, especially the definitions that should be clears and crucial, not only to avoid any misuse, but also to ensure maximum equity for similar cases. The existence of shanty houses, the inexistence of any paper proofing the property and keeping the property on the name of grandfathers regardless whether they are alive or dead will be the most difficult work of the tax administration.

Additionally, the tax administration should improve its performance, especially the registration department that should get an efficient information system, and it should also improve prices evaluation, because most of the transactions pass with artificial prices when completing notarized acts. A large public information campaign is highly recommended to advise everybody about the risks on purchasing houses for storing wealth, and the high taxes that would be applied, especially in case of unoccupied building and the property of more than one house.

Finally, whatever the case, the success of this approach requires the adoption of integrated legal texts taking into consideration the maximum of variables and difficulties may encounter tax administration, taxpayers' capacities, and cooperation with other public entities. To be more practical, it is possible to adopt a new law on real-estate taxation instead of the different dispersed disposals.

#### **5 - BIBLIOGRAPHY**

- Augustyniak, H., Laszek, J. & Olszews, K., 2013. To rent or to buy – analysis of housing tenure choice determined by housing policy, Warsaw - Poland: Economic Institute.

- Benakezouh, C., 1974. The Decentralized Administration of Algeria (l'Administration Territoriale Deconcentree en Algerie). Algeria: s.n.

- Boelhouwer, P., Haffner, M. & Neuteboo, P., 2004. House Prices and Income Tax in the Netherlands: An International Perspective. *Housing Studies*, Vol. 19(No. 3), p. 415–432.

- Bourassa, C. S., 1990. Land Value Taxation and Housing Development: Effects of the Property Tax Reform in Three Types of Cities. *American Journal of Economics and Sociology, Vol. 49, No. 1 (January, 1990)*, pp. 101-112.

- Bourassa, S. C., 1987. Land Value Taxation and New Housing Development in Pittsburgh. *Growth and change*, pp. 44-56.

- Bouteflika, A., 2014. New act on devlopment and progress: 05 main objectives on the program of the candidate Abdelaziz Bouteflika. [Online] Available at: http://www.pfln.org.dz/?p=1738 [Accessed 15 04 2014].

- Chote, R., Emmerson , C. & Oldfield, Z., 2004. The taxation of housing. In: *The Green Budget* 2004. s.l.:IFS Reports (C095), pp. 58-74.

- CNES, 1995. Opinion on the file "Algeria tomorrow', Algiers: OJ 21 of 1997.

- CNES, 1995. Report on the social housing, Algiers: CNES.

- Cremer, H. & Gahvari, F., 1998. On Optimal Taxation of Housing. *Journal of Urban Economics* 43, pp. 315-335.

- Dieci, R. & Westerhoff, F., 2009. A simple model of a speculative housing market. *BERG Working Paper Series on Government and Growth, Working Paper No.* 62, February.pp. 1-34.

- Evans, A. W., 2012. Optimal tax theory and the taxation of housing in the US and the UK. *Journal of Property Research, Vol.* 29, *No.* 4, *December* 2012, 368–378, pp. 368-378.

- Gharbi, N., 2005. *Le contrôle fiscal des prix de transfert [tax audit of transfer pricing]*. Paris: Editions L'Harmattan.

- Guettali, A., 2010. *Elements and Impact of Rural Migration in Algeria [Magister Thesis]*. Batna: University of Batna.

- Hamidou, R., 1988. Le logement un défit. Alger: OPU.

- Hanna, A., Łaszek, J. & Olszews, K., 2014. To rent or to buy – analysis of housing tenure choice determined by housing policy ... *Norodowy Bank Polski Working Paper No. 164*, p. http://www.nbp.pl/ publikacje/materialy\_i\_studia/164\_en.pdf.

- Heywood, A. & Hackett, P., 2013. *the case for a property speculation tax*, United Kingdom: The Smith Institute.

-International Union of Tenants, 2012. *Rental Housing - and why we like it!*. [Online] Available at: <u>www.iut.nu/RentalHousing</u> <u>WhyWeLikeIt.pdf</u> [Accessed 02 July 2014].

- Jack, G., 2005. Houses, Apartments, and Property Tax Incidence. *Center for Housing Studies Harvard University - the annual meeting of the American Real Estate and Urban Economics Association*, January, pp. 1-23.

- Kirker, M., Stroebel , J. & Floetott, M., 2010. *Government Intervention in the Housing Market: Who Wins, Who Loses?*. [Online] Available at: http://ssrn.com/abstract=1582296 or http://dx.doi. org/10.2139/ssrn.1582296 [Accessed 05 07 2014].

- Law 86-07, 1987. relative to real-estate promotion, Algiers: s.n.

- Law 89-27, 1990. National Plan of 1990, Algiers: Algeria Government.

- Law 90-25, 1990. Real estate sector planification, Algiers: s.n.

- Legislative decree 92-04, 1992. pertaining on the Law of finance 1992, Algiers: OJ.

- Leicester , A. & Oldfield, Z., 2004. The taxation of housing. In: *Green Budget*. London-UK: Institute for Fiscal Studies, pp. 58-74.

- Maitrot, G. J. J.-C., 2010. Impôt - Histoire de l'impôt. In: *Encyclopedia Universalis 2010*. Paris: Encyclopedia Universalis 2010.

- Mankiw, N. G., 2016. *Principles of Microeconomics*. Eighth Edition ed. US: Cengage Learning.

- Matthew, C., C. G. & Schlagenhauf, D. E., 2007. The Tax Treatment of Homeowners and Landlords and the Progressivity of Income Taxation. *FEDERAL RESERVE BANK OF ST. LOUIS, Research Division P.O. Box* 442 *St. Louis, MO* 63166 - *Working Paper* 2007-053A, December, pp. 1-41. - Merbii, S., 1984. *Evolution of population in Algeria*. Algiers: National Society for Book Algeria.

-Ministere de l'Economie, 2020. *Impôts locaux : lesquels vous concernent ?*. [Online] Available at: <u>https://www.economie.gouv.fr/particuliers/impots-locaux#TLV%20et%20THLV</u>

- Ministry of housing, 1977. *Instruction relative to housing*, Algiers: s.n.

- Ministry of Housing, 2020. *Public Houses Distribution*, Algiers: Ministry of Housing.

- Ministry of Interior and Locales Authorities, 2020. *Financial Situation of Municipalities in Algeria*, Algiers: MICL.

- Morad, N., 2003. *Efficiency of the taxation system between theory and reality (in Arabic)*. Algiers: Homa Editions.

- Noord, P. v. d., 2003. *Tax Incentives and House Price Volatility in the Euro Area theory and evidence*, Paris: OECD Economics Department Working Papers.

- OECD, O. f. E. C. &., 2004. OECD Economic Surveys: United Kingdom, Reducing the risk of instability from the housing market, Paris: OECD.

- Office of Accounts, 1995. *Annual report of 1995*, Algiers: Official Journal 12.

- ONS, 2009. General census of the population, Algiers: ONS.

- Ordinance 74-26, 1974. Insitution of Reserves on Real-estate for Municipalities, Algiers: s.n.

- Ozanne, L., 2012. Taxation of Owner-Occupied and Rental -Housing. *Working Paper Series Congressional Budget Office Washington*, D.C., pp. 1-36.

- Perloff, J. M., 2018. *Microeconomics Theory and Applications with Calculus*. Fourth Edition ed. US: Pearson.

- Philippe, T., 2005. *Equity and neutrality in housing taxation,* Lausanne: Ecole Polytechnique Fédérale de Lausanne, FAME - International Center for Financial Asset Management and Engineering.

- Prime Minister Services, 2020. *The Plan of the Government 2020,* Algiers: Prime Minister Services.

- Reny , P. J. & Jehle , G. A., 2011. *Advanced Microeconomic Theory*. UK: Pearson Education.

- Rolnik, R., 2011. *Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context.*, New York: United Nations (Human Rights Council).

- Rosengard, J. K., 2012. The Tax Everyone Loves to Hate: Principles of Property Tax Reform. *Mossavar-Rahmani Center for Business & Government or of Harvard University*, pp. 1-19.

- Shan, H., 2008. The Effect of Capital Gains Taxation on Home Sales: Evidence from the Taxpayer Relief Act of 1997. *Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board*, pp. 305-318.

- Sullivan, K. S. a. P., 2014. *Implications of U.S. Tax Policy for House Prices, Rents, and Homeownership.* [Online] Available at: <u>http://www-personal.umich.edu/~paulsull/Taxes.pdf</u> [Accessed 30 01 2014].

- Tabboun, A., 2014. *Algerian Policy on Housing Issues* [Interview] (30 01 2014).

- Tanzer, E. P., 1985. The effect on housing quality of reducing the structure tax rate. *Journal of urban economic*, pp. 305-318.

- The National Charter, 1976. The National Charter of 1976. s.l.:1976.

- Voss, W., 2009. *New Market value based Property Tax in Germany*. Hanoi, Vietnam, Land Governance and the Environment – Building the Capacity, pp. 1-18.

- Zitoun, M. S., 2009. Les politiques urbaines en Algérie: une reforme libérale inachevée. L'Habitat social au Maghreb et au Sénégal, L'Harmattan, Paris,, p. 65.

- Zouzou, R., 2008. *Rural Migration in the Context of Social Evolution in Algeria [Doctorah Thesis]*. Biskra: University of Biskra.

| Table 2. Distribution of the total housing units                                     |                       |                         |                |                       |                                    |                 |         |  |  |  |
|--|-----------------------|-------------------------|----------------|-----------------------|------------------------------------|-----------------|---------|--|--|--|
| Panel A. Distribution  | of the Tota           | l housing               | g uni          | ts between            | rural and u                        | rban area       | s       |  |  |  |
| Principal urban gath-<br>ering   | Second urban gatherin |                         |                | ering                 | Rural gathering                    |                 | Total   |  |  |  |
| 4700837  |                       | 1051389                 |                |                       | 933898                             |                 | 6686124 |  |  |  |
| 70,31%   |                       | 15,72%                  |                |                       |                                    | 13,97%          |         |  |  |  |
| Panel B. Distribution of the Total housing units according to the housing occupation |                       |                         |                |                       |                                    |                 |         |  |  |  |
| Occupied houses  | Second                | Secondary house         |                | Vacant                | Adjusted for profes-<br>sional use |                 | Total   |  |  |  |
| 5304344  | 41                    | 412048                  |                | 932610                | 37122                              |                 | 6686124 |  |  |  |
| 79,33%   | 6,                    | 6,16%                   |                | 13,95%                | 0,56%                              |                 | 100%    |  |  |  |
| Panel C. Distribution of the Total housing units according to the nature of building |                       |                         |                |                       |                                    |                 |         |  |  |  |
| Collective housing   |                       | Individual hous-<br>ing |                | aditional<br>ousing   | Shanty<br>building                 | Others          | Total   |  |  |  |
| 1015751  | 31982                 | 3198252                 |                | 734394                | 209734                             | 146213          | 5304344 |  |  |  |
| 19,15%   | 60,29                 | 60,29%                  |                | .3,85%                | 3,95%                              | 2,76%           | 100%    |  |  |  |
| Panel D. Distribution of   | f the Total ho        | using uni               | ts acci        | ording to th          | e number of r                      | ooms            |         |  |  |  |
| One room 1   | Two (2)<br>rooms      | Three (3)<br>rooms      |                | More<br>thanfour<br>4 | Others                             |                 | Total   |  |  |  |
| 488492   | 1206903               | 18743                   | 1874359 163680 |                       | 97784                              |                 | 5304344 |  |  |  |
| 9,21%  | 22,75%                | 35,34% 30,86            |                | 30,86%                | 1,84%                              |                 | 100%    |  |  |  |
| Panel E. Geographical I  | Distribution o        | f the hous              | eholds         | 5                     |                                    |                 |         |  |  |  |
| Principal urban gath<br>ering  | Seco                  | Second urban gathering  |                |                       |                                    | Rural gathering |         |  |  |  |
| 4154015  |                       | 908255                  |                |                       |                                    | 752998          |         |  |  |  |
| 71,43%   |                       | 15,62%                  |                |                       |                                    | 12,95%          |         |  |  |  |
| Distribution of the hous   | eholds accord         | ing the ni              | ımber          | of family n           | nember                             |                 |         |  |  |  |
| Principal urban gath<br>ering  | Seco                  | Second urban gatherin   |                |                       | Rural gathering                    |                 | Total   |  |  |  |
| 5,7  |                       | 6                       |                |                       | 6,5                                |                 | 5,9     |  |  |  |
| Source. (ONS, 2009)  |                       |                         |                |                       |                                    |                 |         |  |  |  |