

# A Fintech approach towards resolving the Young Adult Home Ownership challenge.

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**Abstract.** Housing prices globally remain very expensive for young adults while financial instruments to obtain them become more complicated, demanding, and discouraging, especially in the modern post global financial crisis (2007-2017). The way people acquire homes haven't change over the last 100 years, maintaining the three classic and dominant alternatives which is either thorough mortgages, cash payments, or combination of these. Young adults have been underserved by financial institutions and their products have not yet met young adults' conditions. This research has been directed to utilize today's technology and contribute with innovative financing solutions that can address the young adults' needs. The proposed Fintech approach presents the architecture of a technology-based platform whereby Co-sharing agreements between real estate developers and young adults can be created. Such agreements can be integrated into the financial institutions processes to efficiently address and serve this significant target group by delivering creative innovative financing alternatives.

**Keywords:** Fintech · Housing · Real Estate · Management · Finance · Social Value · Co-sharing · Investments · Scandinavia · Knowledge Management

## 1 Introduction

Today's young adults are facing a global homeownership crisis. Homeownership has become a distant dream – while overpriced rents have become the new normal. To date, young adults are locked out of the real estate market and the situation is deteriorating. In fact, a study conducted at the institute for fiscal studies, showcases the recent development, by measuring the homeownership rate of two different age groups at a given age, in this case at 27 years. The findings indicate that young adults born in the late 1980s attained a homeownership rate of 25% at age 27, while those born in the late 1970s had a rate of 43% at the age of 27 [1]. This pattern shows no signs of change, and this is very likely to intensify in the coming decade.

In Sweden, the homeownership rate for young adults has never been as low as it is today. In more than half of the municipalities, young adults are declined mortgages [2]. At the same time, the average queues for first-hand rental apartments are 10 years in the major metropolitan areas [3]. Thus, young adults pay overpriced second-hand rental agreements, seek insecure temporary solutions, or live with their parents [4]. Consequently, young adults are forced to postpone their homeownership and miss out on long term housing appreciation. In fact, 9 out of 10 young adults do not have the opportunity to buy a newly built one-bedroom apartment and are forced into temporary expensive solutions. This translates to an average price of € 1100 for a one-bedroom apartment in second hand on a monthly basis [5]. Since the rent amounts to a majority of the monthly income, a harmful spiral is created.

## **2 Home Ownership Challenge**

Increased housing prices together with high down payment requirements, strict amortization requirements, and credit rules make it almost impossible for young adults to acquire an apartment [2]. Even if one can meet one of the above requirements, in most cases can't meet all of them [2]. This results in server social and economic consequences. In Sweden, the homeownership rate has never been as low as it is today [4]. In more than half of the municipalities, young adults are denied mortgages [2]. At the same time, the way people acquire homes haven't changed during the last 100 years. Two dominant alternatives exist today; either one applies for a mortgage or pays only with cash. However, with the help of technology, better processes shall exist.

This paper emphasizes on analyzing the current housing market conditions, identifies the key challenges for the young adults to purchase a house and proposes a solution that can be used to contribute on resolving the global homeownership crisis. The research is focused in Scandinavia and specifically in Sweden targeting the housing challenge for young adults, seeking potential viable solutions on how to get young adults onto the property ladder.

A viable solution would enable young adults to get onto the property ladder faster and thus stop spending money on overpriced rent. Furthermore, it would enable young adults to accept jobs in thriving cities and create families faster. In turn, this would increase intellectual capital in cities, which would create added economic and social value [6]. This project contributes to the housing challenge in Sweden, but also benefits similar countries facing similar housing problems for young adults.

## **3 Research Methodology**

The research results derive from academic primary and secondary research based on international literature review, statistical data and 6 interviews with experts holding executive positions in organizations related with the housing sector such as financial institutions, real estate, construction, and private banking.

Mostly structured and unstructured interviews have been conducted. Quantitative structured questionnaires from young adults have been omitted as a vast amount of

data that validates the problem from a young adult's perspective is available. By conducting interviews with different high-profile industry experts with diverse knowledges and experiences we have assured the validity of the research. These interviews helped to investigate different professionals' perspectives about the topic in-depth. This provided a more holistic understanding about the problem, the constraints, and the feasibility of the proposed approach which helped to develop a potential solution.

The research is based on the following two hypotheses. First, young adults are particularly eager to seek out new solutions in the market due to how underserved they are in terms of financial products for acquiring a home. Second, the real estate financing & mortgage industry is facing disruption from start-ups and scaleups. Thus, one must be willing to innovate.

The following industry professionals have been interviewed: 2 senior bankers, 2 chief executive officers of two different real estate development companies, the Vice President of one of Sweden's largest developers and lastly the manager of a new innovative financing concept for young adults.

#### **4 Research results analysis and proposed solution.**

The most important takeaways from the interviews in terms of problems and concerns for young adults and real estate development companies, are set out below.

From the young adult's standpoint, the key findings are the increased housing prices, high down payment requirements, and overpriced second-hand rental agreements. From the real estate developer company's standpoint, it is that the unit economics behind new innovative financing solutions is not compelling enough and remains a concern, together with regulatory issues related to the production of small apartments and profitmaking.

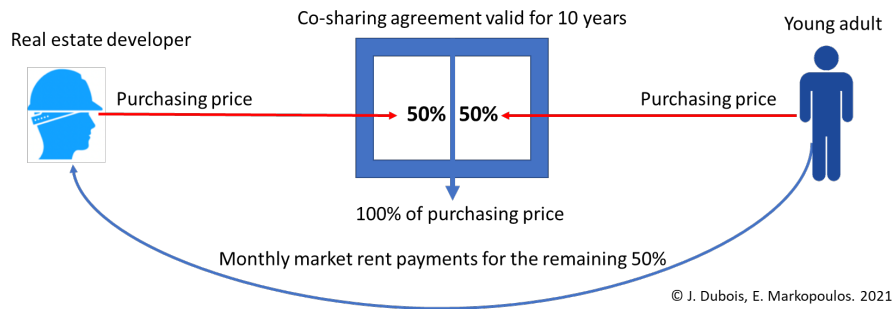
Based on the data and pinpoints extracted from the interviews, a proposed solution has been developed. The solution is based around the concept of co-sharing agreements between real estate development companies and young adults.

Simply put, a real estate development company can act as a co-investor into young adult's apartments, by only selling 50 % of the newly developed apartment. Hence, a co-ownership between the young adult and the given real estate development company is created. This enables young adults to purchase only 50% of the given apartment, and pay market rent for the remaining part to the real estate development company. A co-sharing agreement is valid for a maximum of 10 years, meaning that the apartment must be sold after 10 years. To protect the real estate development company from speculation, they will always obtain the right to purchase back the 50% from the young adult at the original purchase price adjusted to the housing price index.

For young adults, this results in a significant lower purchasing price, which translates into a lower down payment and lower percentage of debt in relation to their income. Therefore, the young adult can avoid the strict amortization requirement, which in turn results in lower monthly payments since young adults obtain much lower debt.

For the real estate development companies, the proposed solution creates value by enabling them to sell objects faster and creates a more diversified revenue stream,

which is a mix of selling and renting out an apartment. Figure 1 presents the co-sharing agreement concept.



**Fig. 1.** The Co-sharing agreement concept.

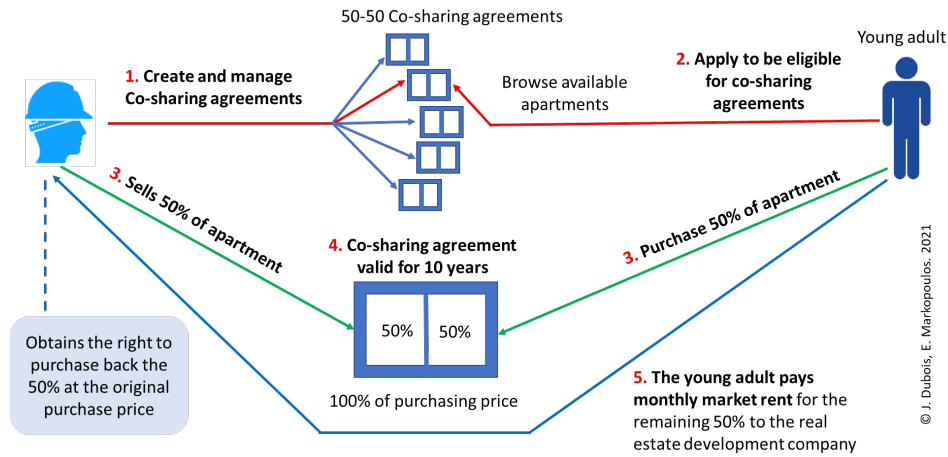
## 5 Co-sharing platform operations

The Co-sharing platform enables real estate development companies to create and manage co-sharing agreements in a seamless process. The platform operates in five steps indicated at figure 2. The process begins with the connection of the real estate development company to the platform, where they can create and manage different co-sharing agreements.

The young adult has to apply to be eligible for a co-sharing agreement as the process checks everything from credit score to the current salary. Once approved, the young adult has the option to purchase 50% of the apartment with a down payment and a mortgage. The remaining 50% comes from the real estate developer since they have already produced the apartment and by selling them at half price, they become co-owners in the given apartment.

The co-sharing agreement is valid for 10 years. After this period, either the young adult has to purchase the 50% of the real estate developer or sell the whole apartment. The young adult pays a monthly market rent to the real estate developer for the part she or he does not own. Based on the interviews, this seems to create an economic incentive for real estate development companies to offer co-sharing agreements.

In order to protect the real estate developer from speculation, they can obtain the right to purchase back the 50% from the young adult at the original purchase price adjusted to the housing price index. During the 10-year period, the young adult has the option to sell his or her part. If the young adults decide to sell, then both parts should be sold. However, the real estate developer will always have the right to buy back the 50% at the original purchase price adjusted to the housing price index.



**Fig. 2.** The Real Estate digital Co-sharing platform operations process.

The main benefit for real estate developers from adopting the proposed solution is the ability to become more flexible and most importantly – be able to sell parts of objects (housing compounds) at a faster phase and pace, including objects that are hard to sell, gaining this way additional value for the firm.

## 6 Socio-economic impact of the proposed solution

By establishing the co-sharing platform, real estate development companies are able to frictionless offer co-ownership to young adults and thus sell objects faster as the total number of people who will be able to buy a given apartment will increase. This would enable real estate developers to diversify their revenue streams, as co-sharing agreements is a hybrid between selling and renting out an apartment from a real estate developers' perspective. For young adults, this would reduce the purchasing price by 50% which would enable young adults to get onto the property ladder faster and hence stop spending money on overpriced rent.

Furthermore, it would enable young adults to accept jobs in thriving cities and create families faster. In turn, this would increase intellectual capital in cities, which would create added economic and social value. By making it easier for real estate development companies to sell objects faster and making it more affordable for young adults to purchase an apartment, it can be argued that this proposed solution is making homeownership accessible for more people. All of the data extracted from the primary research indicate that the proposed solution has the ability to make homeownership more accessible and benefit all involved parties.

The overall proposed approach can be considered a sustainable Green but also Pink Ocean Strategy for the real estate developers [7], [8]. The process addresses socio-economic issue as it enables young adults to get onto the property ladder faster, stop spending money on overpriced rent, and concentrate on their personal and professional development.

Specifically, it can enable young adults to accept jobs in thriving cities and create families faster. In turn, this would increase intellectual capital in cities, which would create added economic and social value.

## **7 Limitations and Areas of Further Research**

The proposed solution needs further research and development as it faces certain limitations. The most notable limitation is whether the total monthly payments becomes too high for the young adult – since he or she must pay both rent and mortgages fees. Another large limitation is whether the opportunity cost is too big for a real estate development company to offer something like this, in other words it is the question if this really creates an economic incentive for real estate development companies.

More research is also needed on the economic & profit perspective from a real estate development company and thus how the solution would work in different micro-economics and macroeconomics environments. This will result into a more complete and well-rounded solution.

Furthermore, research addressing the economic & profit area would contribute to a more solid understanding as to how the model would precisely financially work and how it would respond to different macro and micro scenarios. This research could be based on scenario testing and stress testing to predict better the economic & profit effect of the model, both from a real estate developers' perspective but also from a young adult's perspective. This would contribute to a better understanding of how the model would work in different environments and thus how it can be furthered improved.

## **8 Conclusions**

To conclude, young adults' current situation in the homeownership market is unsustainable. This has been seen throughout the primary research conducted in the research. New innovative financing solutions address the problem but struggle to solve the problem due to poor unit economics, which is the reason of why the push has to come from well-established real estate development companies.

In the near future, housing prices will surely not decrease [9], they will keep on intensifying as a consequence of the rapid urbanization which is expected to increase significantly in the coming decades [10]. Real estate development companies will continue to maximize wealth for its shareholders by producing apartments that maximizes profits. In order not to lose the future generations; young adults - the acute housing problem must be solved on a global scale so that people can reach their full potential and contribute economically and socially to society, instead of trying to find overpriced contemporary shelters. There is no point for one to create more vibrant cities if the young people cannot afford to live in them.

The proposed solution aims to create value for both real estate development companies and young adults in order to make the solution financially viable. It solution effective collaboration between all involved parties and thus creates synergy effects to

the overall industry. By implementing such solutions, cities, companies, young adults and governments can be part on creating a fairer world in terms of housing, which is highly needed.

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