Applying Risk-Sharing to Mitigate Economic Consequences of the COVID-19 Pandemic

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Abstract—The COVID-19 pandemic is expected to have a severe socio-economic impact with significant losses of GDP and high unemployment rates. As a result, governments worldwide are attempting to mitigate these impacts through government intervention. One major method of alleviating the socio-economic impact has been to reschedule or defer loan and mortgage payments to ease the burden off borrowers and mitigate a massive wave of defaults. In other words, the governments are attempting to impose a degree of risk-sharing in the economy.

This paper debates the advantages of risk-sharing practices in the financial system in times of economic crisis, and argue that this should instead become the norm in the financial system and not only in times of economic downturns or pandemics. This paper further highlights that, although the principle of risksharing is enshrined in Islamic finance, many Islamic loans and mortgages do not reflect risk-sharing in practice. Instead, only a few genuine examples exist that actually do apply risk-sharing. These examples should be taken as best-practice models substituting the pervasive risk-transfer model that in times of crisis burdens the borrower in specific, and the entire society through government interference in general.

Keywords- Profit-sharing, risk-sharing, COVID-19, government interference, public aid

I. INTRODUCTION

The COVID-19 pandemic had affected over 150 countries by the end of March 2020 with many countries initiating stayat-home measures (lockdowns) and curfews as well as closing down most aspects of public life [1]& [2]. The effects of COVID-19 are expected to have far-reaching effects, first and foremost in the loss of lives occurred and expected.

As a second effect¹, the socio-economic impact is expected to be severe, with losses of up to 2.4% of global GDP expected in 2020 [3]. This has prompted many countries to intervene economically in an attempt to mitigate the worst socioeconomic effects of this crisis. For example, the European Parliament has issued a "Corona Response Investment Initiative" ensuring funds "will go to healthcare systems, small

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and medium-sized firms, labour markets and other vulnerable parts of EU countries' economies" [4] & [5]. Similarly, the United States Senate has passed the "Coronavirus Aid, Relief, and Economic Security Act" promising \$2.2 trillion, with almost half (\$1.17 trillion USD) earmarked for businesses in the form of loans or tax cuts, while funding for hospitals and healthcare was budgeted at \$180 billion [6].Other countries followed suit such as Turkey with a \$15.4 billion plan [19] and Japan followed in the first week of April, with a stimulus package surpassing 20% of Japanese GDP [18]. It is expected that by the end of the crisis, many countries will enact similar measures.

These public measures to address the socio-economic impact highlight an important drawback of our current economic and financial system: Our financial contracts lack any and all aspects of risk-sharing. It is therefore the objective of this paper to debate the drawbacks of the lack of risksharing, and show the merits of risk-sharing in the context of the current crisis, i.e., how risk-sharing could have helped mitigate much of the negative socio-economic impacts of this crisis.

Most importantly, risk-sharing would have allowed governments to play a much less intervening role in the economic sphere. This paper does not claim to dictate the extent of the role governments should play, but only argues that the required monetary aid would have been lower if risksharing was more prominent. The methodology of this paper is qualitative in nature and deals with the issue in an exploratory fashion. The problem is tackled by debating the advantages and disadvantages of risk-sharing in theory and practice.

The main contribution of this paper is to connect the recently growing literature on risk-sharing during COVID-19 with the principle of risk-sharing in Islamic finance which seems to have been lost amongst the newest literature on the matter. As will be shown briefly below, a number of recent studies on contributions on the issue from well-known entities are struggling with the idea of risk-sharing and trying to identify its problems, although this has all been extensively researched in Islamic finance over the years.

¹ Although I count it as "second", one must clearly state that loss of human lives cannot be comparable to any socio-economic damages on any humane scale.

II. THE PRINCIPLE OF RISK SHARING

In the second policy brief of the Economics for Inclusive Prosperity series, AnatAdmati rightly begins her essay with the sentence "A healthy and stable financial system enables efficient resource allocation and risk sharing" [7], and in another article by the author the idea of risk-sharing as an alternative to debt was discussed in more details [8]. However, it is still worth mentioning what is meant by this principle:

Fundamentally, risk sharing means that the fates of both the borrower and lender should be tied together. Borrower and lender should gain income only in positive economic situations, and both share the risk in adverse economic situations. Risk-sharing of this nature reflects the essence of fairness and Shariah-compliance in respect to financial dealings and ensures that no party is taken advantage of due to their financial position in the contract.

In this sense, mortgages and loans would be tied to the income/earnings of the borrower, and if it would so happen that the borrower loses all sources of income due to an external factor, such as a worldwide pandemic, the lender would be in no position to demand any payments since they are both in a risk-sharing contract.

Similarly, one must remember that public financing operates in a similar way in almost all tax codes: The government will not collect taxes from firms and companies affected by the shutdown to the extent that they make no profits. This is not a new behavior conditional on the current crisis, but is simply how taxation works. If the taxpayer loses their source of income, they are no longer required to pay taxes.

This stands in stark contrast to a conventional interestbased personal loan where the bank requires interest payments during both positive and adverse economic situations equally, thereby isolating the bank from sharing in the risks of the borrower (unless the borrower defaults completely). Therefore, the conventional interest-based system is based on risktransfer, where the bank transfers the entire risk of repayment to the customer, and can sit back and expect its legal right to receive interest regardless of external economic conditions.

III. EXAMPLES OF GENUINE RISK-SHARING IN PRACTICE

How would such a contract look like in practice? One can find a very small number of companies that actually apply these ideas.

A. Risk-sharing Employment

Some restaurants that do not offer wages, but instead offer a form of profit-sharing compensation. If the restaurant faces an economic downturn (or a pandemic occurs), the employer would not be required to decide between laying off employees, or paying them their full-wage. Instead, the employer is only required to share in profits that are received – if any exist. In a case study of one of these restaurants, it was found that this system enhances productivity and motivation of the employees without overburdening the employer (see [9]).

B. Risk-sharing Student Loans

A number of student loan organizations, often supported by governments, apply the risk-sharing principle by providing college students with funding, in return for a portion of the students' income upon full-time employment. In this sense, once again, the student is not required to make payments if they are currently unemployed, thus removing a major source of burden if economic downturns occur (For example see [10]).

C. Risk-sharing Personal Loans

Some private companies or investors provide financing to individuals in return for a set portion of their future incomes. As a result, no payments are required if the borrower is laid off due to an economic downturn (or an ongoing pandemic). On the other hand, higher payments are due if the borrower is promoted during the term of the contract (For example [11]).

IV. RISK-SHARING DURING THE COVID-19 PANDEMIC

Though these examples are currently the exception rather than the rule, one can see the advantages of such a system, which ensures fairness by not imposing undue burdens on borrowers. The latest policies conducted by the United States show how necessary risk-sharing is to alleviating the economic effects of the COVID-19 pandemic: The Coronavirus Aid, Relief and Economic Security Act forces banks to share the risk of their borrowers by allowing forbearance of up to 60 days, extendable for four 30-day periods for anyone with a federally backed mortgage loan facing financial hardship during the crisis. No fees, penalties or additional interest are charged for the delays. In other words, payments are simply deferred to a later time when economic conditions are kinder to the borrower. The Act also instructs that student loan payments be suspended without penalty or accruing interest through September 30th, and provides loans to mid-sized businesses while requiring no payments during the first six months after loan issuance [12] & [13]. Similar measures have also been taken by the Italian government, which is allowing selfemployed and freelancers with mortgages to suspend their payments for up to 18 months if they can prove a reduction in income by at least one-third. This will also be applied to commercial rents of business that have been forced to close down [14]. The Japanese and Turkish governments are reported to have instructed banks and insurance companies to defer payments and dues for 3-6 months [18] & [19].

Risk-sharing is also becoming relevant on an international scale, with EU countries suggesting different ways to share risk, whether medical risks, or default risks on their sovereign debt [22].

In a recently published article, Ainsworth & McKenzie highlight uses of risk-sharing in higher education in the United Kingdom, giving examples of "equity" based funding programs that have been encouraged or actually used and their benefits during the COVID-19 crisis [21].

In an article for Allianz Global Investors, it is stated that short-term lending as conducted by banks is witnessing a drop due to COVID-19 and as an alternative "partnering for longterm growth" must be encouraged especially for funding of SMEs. They further state that "partnerships that divide up the risk-return rewards" are required [20]. It is however worth mentioning that this article was published in July 2020, while the ideas of risk-sharing have been suggested long before these observations during COVID-19 were made (see examples for risk-sharing in social financing [23], examples in crowdfunding [24].

Not only is this idea being considered and put into practice by government entities, but also private mortgage providers are considering plans to suspend mortgage payments during the pandemic, however long it may last [15] & [16].

On a global level, the IMF explicitly encourages loan modifications to allow for payment rescheduling, mentioning clearly that these measures are not only meant to benefit borrowers, but even lenders will gain by avoiding high default rates which could lead to a major crisis such was witnessed in 2008 [17].

It is important to mention that the current risk-transfer business model of banks does have advantages as well: It offers plannability and the enticing idea of always receiving a profit regardless what is happening in the economy, i.e., banks are contractually owed their interest payments and could in theory sue for their rights and foreclose people's homes for defaulting on their mortgages. However, the 2008 financial crisis and the current pandemic both highlight the magnitude of the advantages of the risk-sharing system over the advantages of the risk-transfer system, namely the ability to avoid defaults even if that comes at the cost of reduced plannability and a non-constant payment stream. One should remember that the financial system deals in reduced plannability and non-constant payment streams on a regular basis anyway, namely in equity investments. Not only are the advantages of risk-sharing economic, but also for society [8].

V. CRITIQUE OF ISLAMIC LOANS AND MORTGAGES

On a side note, it is important to mention that the principle of risk-sharing is the key to achieve these improvements, and not simply Islamic financial contracts since these do not always include elements of risk-sharing [27]. For example, some Islamic mortgage contracts conducted through Financing Lease (Ijarah muntahia Bittamlik), Installment Purchase with Mark-(Murabahah), or even Diminishing Partnership Up (Diminishing Musharakah) do not ensure the fairness of a risksharing structure. These contracts demand stable equal payments along the lifetime of the contract and do not - in their contractual form - allow for payment rescheduling or suspension during times of crisis for the borrower. In other words, these contracts in their current form are just as harmful to the economy during times of crisis as conventional loans and mortgages in terms of the overall burden to the borrower, which can eventually lead to massive defaults.

As one study out of Pakistan shows, Islamic bank managers worry about regulatory issues in terms of overexposure to equity and tend to minimize such contracts as much as possible [26]. A relevant critique, even though not entirely addressed at Islamic loans, is mentioned in the article on risk-sharing in higher education in the UK, Ainsworth & McKenzie highlight that a degree of moral hazard exists within risk-sharing products which must be regulated and considered in the product design [21]. This is also supported by a recent IMF working paper [22] as well as recent publications within the Islamic finance literature [25].

VI. CONCLUSION

The aim of this paper is to highlight the advantages of risksharing practices in the financial system in times of economic crisis. Although the economic measures taken by governments worldwide to lessen the economic burden of the crisis are indeed an aspect of risk-sharing, they are meant to only be temporary. I argue that this should instead become the norm to alleviate socio-economic consequences, not only of the current pandemic, but during any economic downturn which could overburden borrowers causing massive defaults which may force government interference. One must always remember that government intervention is, in its essence, sharing of risk among all taxpayers.

This paper further highlights that, although the principle of risk-sharing is enshrined in Islamic finance, many Islamic loans and mortgages do not reflect risk-sharing in practice. Instead, only a few genuine examples exist that actually do apply risk-sharing. These examples should be taken as bestpractice models substituting the pervasive risk-transfer model that in times of crisis only burdens the borrower in specific, or the entire society through government interference in general.

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