

Helicopter Money as An Option for Monetary Policy in Dealing with Recessions in Iraq

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Abstract

In light of the worsening health conditions globally due to the Corona pandemic, and the trend of the global economy towards deflation and stagnation, it is asked how this recession will be faced in light of the negative effects that traditional methods in financing may cause from low interest rates and economies in the liquidity trap, which it causes damage to private investment and increases fears of debt inability to repay. Therefore, many economists are looking to return to the unconventional theoretical approach that Milton Friedman referred to in 1969, which was known as helicopter money, and whose content is concentrated as the last resort of monetary policy to stimulate economic activity. Consequently, this plan is based on the conversion from the traditional current credit system to a new money system backed by trust and reputation. The parties that issue this money are the central banks, and here the issuance of money does not result in a special debt but rather as an asset supported by central banks, but on conditions that this mechanism is not permanent. Likewise, helicopter money is a mechanism for coordinating monetary and fiscal policy together. Accordingly, the research paper is based on the following questions:

- How is stimulating aggregate demand and getting out of the crisis by (helicopter money)? What are the requirements or conditions for the success of this mechanism?
- Can Iraq and its monetary policy use this mechanism in light of the triple shock the country is going through (Corona pandemic, low oil prices, political crisis)?

Keywords

Helicopter money, unconventional monetary policy, economic downturn, poll

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Introduction

Helicopter money has been a theoretical approach for the past decades, but some specialists now see it as an acceptable last resort for monetary policy in applying its procedures. In order to assess the costs and benefits of helicopter money in light of the global economy entering the deflation tunnel, which is likely to be a recession that strikes economic structures, and reflects on the societal environment, as a result of a double global shock represented by a negative shock in the global oil prices, and a negative shock in the practice of economic activities as a result of a pandemic, Covid 19, as for Iraq, it is a triple shock, in addition to the two shocks, a third political shock is added. What this shock has caused is the delay in approving the general government budget that needs legislative characterization, before reaching this unconventional, innovative idea of monetary policy, it is important to start from a reference point (theory), which Friedman's work on this topic presented and which we will explain in the following points.

The Literature Review

The concept of Helicopter money was introduced by American economist Milton Friedman (1948) by saying, "Let's assume that one day the helicopter circled over society and started to throw an additional 1,000 dollars in the form of instruments from the sky, and also assume that everyone is convinced that this is a rare event that can never be repeated." (Friedman, 1969, p. 4). Friedman believes that the lack of nominal demand in the economy and its insufficiency must be a permanent solution to it, and suggested that if the economy suffers from a lack of actual demand, the government (the central bank) must print the money, and its rain from the helicopter, which the public will pick up and spend, which will lead to an increase in the nominal GDP, which may result in a combination of high inflation and real GDP, the impact of which will be determined according to the marginal propensity to consume and the marginal propensity to save, that is, the helicopter money depends on economic units spend their new wealth instead of saving it, i.e. the degree of monetary stimulus will determine the ultimate effect. (Friedman, Jun 1948; Radošević, 2016, p. 512).

It is worth noting that the credit for reviving this unique theoretical approach is due to economic events during the past quarter-century that led to more serious consideration of the idea of helicopter money as a potential tool for increasing output and inflation in the mid-1990s, when Japan began to suffer from deflation.

In his 2002 speech, Ben Bernanke mentioned the helicopter money approach as a last resort for Japan's exit from the liquidity trap, as well as a strategy that could be adopted by the Federal Reserve if deflation reached the United States. (Gomes, 2017, p. 9).

The prerequisite for adopting an unconventional method of monetary policy measures is an economic downturn that can have very bad results for the economy if it is not confronted properly. Friedman focused in his analysis on the depression of 1929, considering that it is a monetary phenomenon, explaining that the central banks have failed in providing sufficient money supply and given the opportunity for deflation to spread very significantly in the economy, when prices drop and economic units will be reluctant to complete their spending and make consumer and investment decisions, because of their expectation that tomorrow will be cheaper commodities on this side, and on the other hand, heavy debts will be valued more than their nominal value due to the lower prices, i.e. it will be paid with higher value money in the next day, and here the economy will enter into a vicious circle and that economic weakness creates a decline in prices, which leads to more weakness. (Irwin, 2016, pp. 1-2).

Therefore, stimulating the nominal demand using helicopter money focuses on the belief of the family sector that it has achieved a gain represented by an increase in net wealth, whereas conventional methods do not generate this impression and individual expectations, but rather focus on expanding the credit range of commercial banks or buying assets between them through new money that was added. (Belke, 2018, p. 35).

The protesters see that it is difficult to say with certainty how positive the effects of this strategy may be. It is difficult to predict the effects of helicopter money due to the lack of application at the experimental level significantly, but it can be said that its success depends to a large extent on its ability to reshape consumer behavior and inflation expectations. If consumers see that the central bank following this policy is a sign of stagnation, they may lose confidence in the ability of the central banks to manage efficient monetary policy, which leads to saving the helicopter

money instead of spending it, which makes this strategy largely unsuccessful, on the other hand it can lead, helicopter money can perform through its impact on expectations to raise the rate of inflation above the target rate (La Rose, 2016, p. 8), but a small increase in inflation will be more desirable than entering contraction and stagnation and has a positive benefit and can be a catalyst for economic activity, which will increase the real output, which will contribute to the disappearance of these inflation after a while, and there are examples from economic history that show that there are many governments that have used money printing to stimulate nominal demand but without generating dangerously high inflation on the economy (Turner, 2015, p. 219). It should be noted that the impact of the helicopter money strategy depends on the public's confidence in the central bank, the issue of trust is necessary for central banks and is important because in the end it derives its democratic legitimacy from public confidence in it, and the existence of high confidence in the central bank and its procedures contribute to the growing credibility between the central bank and the public, which will help to stabilize the inflationary expectations of the public and not to doubt its decisions. Therefore, it is important to know the impact of helicopter money on the public's confidence. (Rooij & de Haan, 2019, p. 2).

In other words, when the economy enters a state of deflation and stagnation and this situation is reflected in the contraction of the balance sheet of the private sector, monetary policy will lose the ability to be effective with the traditional method based on stimulating economic activity through interest rate movements and investment decisions and reconfigure the investment portfolio, due to the pessimistic expectations of the economic units, and the possibility of entering the liquidity trap that loses the credit channel is any effective role in stimulating economic activity and facing deflation, i.e. the interest rate will lose its role in linking the monetary and real sectors and thus the monetary side changes will not be reflected in the real and thus the economy suffers from the separation between the real and monetary sectors (Koo, 2011, p. 25). Here, we must switch to unconventional measures of monetary policy and adopt another channel to stimulate economic activity, and the channel of income and wealth may be more stimulating in light of the status quo dependent on raising the impact of wealth and thus changing the consumption pattern in a way that guarantees the stimulation of economic activity and is what helicopter money can do.

Conceptual Framework

Requirements for A Successful Helicopter Money Strategy

In order to be an effective strategy, helicopter money must be taken into account that the targeted societal group or individuals are with a high marginal propensity to consume. There are points that must be taken into account: (Oteri, 2019, p. 55)

- 1- The helicopter strategy must be unpredictable by the public, which will lead to real and tangible consumption stimulus.
- 2- That the monetary authorities do not seek to recover or absorb liquidity from the market, which leads to a permanent increase in the monetary basis, which has an effective role in increasing payment tools in society.
- 3- New liquidity or money transferred to the target group must be an economic advantage.

Helicopter Money Transfer Channels

(Bernanke, 2016, p. 2) believes that helicopter money will be effective in stimulating the economy through a number of channels even if there is a high government debt or interest rates close to zero and by analyzing the following:

- 1- If government projects are funded as a form of helicopter money, the direct effects of public works spending on gross domestic product, jobs, and income are positive;
- 2- The increase in household incomes from this strategy, which would lead to an increase in consumer spending;
- 3- A temporary increase in the expected inflation as a result of an increase in the money supply, assuming that the interest rate is close to zero and that the high rate of inflation will lead to a decrease in real interest rates, which in turn should stimulate capital investments; and
- 4- The fact that, unlike debt-funded financial programs, the helicopter money program does not increase future tax burdens.

Forms of Helicopter Money

Friedman's proposal includes that central banks give money directly to people, but recent models have proposed other forms among them that central banks make direct transfers to private sector accounts or only to the population, or distribute the present value of future wealth, all of these proposals are aimed at significantly stimulating immediate demand, in concrete terms, and as a result, the ultimate goal of modern central banks is to avoid deflation. (Bogdan, 2017, p. 118).

It is possible that the central bank, as a form of helicopter money, extinguishes part of the government's debts in the economies that allow the central bank to acquire government bonds, and this measure will lead to a reduction in the ownership rights of the central bank. The increase in the monetary basis is permanent, but it is possible to diagnose the exact opposite. If the central bank does not reduce or extinguish the government debt, the government will be obliged to pay the value of the bonds to the central bank, which in its content will decrease the assets of the central bank, as well as decrease its obligations in other words, the government's repayment will be based mainly on withdrawing this money from the private sector, therefore the process of extinguishing government debt corresponds to the permanent increase generated by helicopter money (Kashama, 2016, p. 35). Or the central bank can write a large instrument to the government, which the government in turn will transfer fully to the private and family sectors (Benigno & Nisticò, 2020, p. 3).

Or it is possible for the central bank to finance some new projects for the government, for example spending on infrastructure, according to this option. The government does not issue bonds to finance spending and does not pay for new printed money and does not increase its debts or budget deficits, and this method will have an effect on creating an additional work for contractors, builders, material suppliers and others, which will lead to higher wages and the provision of new job opportunities, which will also affect the multiplier as production elements from contractors, manpower and others spend what they get in shopping centers and on various goods and that will improve economic activity. In all sectors, as a result of sectoral interlocking (ING, p.6), this impact depends on the size and viability of these projects funded by the central bank (Mencinger, 2017, p. 6).

Central Bank Between Helicopter Money and Quantitative Management Tools

In fact, the effect of the two policies will be different on the public. In light of the quantitative management procedures, people may not expect a permanent increase in the monetary basis, unlike the announcement of taking helicopter money measures, the expectations will be that this increase is permanent even if the public does not fully understand the consequences of the strategy (Lucrezia Reichlin, 20 May 2013, p. 2).

In the past few years, many central banks have followed unconventional methods of monetary policy, such as Quantitative Easing (QE) such as the Federal Reserve, the European Central Bank, and Central Bank of China, etc. Securities until people get rich and that will push them to spend more than what helps the economy to grow, and from the diagnosis of the period 2008-2017, it was found that this mechanism did not succeed most of the time in revitalizing the economy. The main reason for not providing quantitative management is the appropriate stimulus to activity on the one hand, because the truth says that most of the assets such as real estate and stocks are owned by the rich in the world, and therefore not everyone benefited from the upward price movement, and on the other hand this system is considered a closed loop so when the Federal Reserve printed the money to buy mortgage bonds issued by bankers and financial companies and on the assumption of the reserve bank that the companies / bankers will receive these funds and invest in them in the real economy, but such an assumption was not achieved and those funds went into the financial markets and did not enter the real economy. In other words, the failure of the rates to zero and the failure of quantitative management by the central banks worldwide failed to achieve its intended purpose (Jain & Kondeti, 2016, pp. 72-73), (Agarwal & Chakraborty, 2019, p. 5).

There is a critical difference between helicopter money and quantitative management. With regard to quantitative management, central banks create money out of the blank to buy government bonds, which means printing money to finance the government deficit, with which central banks buy assets that the government must repay to them when the due date comes,

and the money collected enables banks to buy again new assets, and this depends on the necessity of its intervention in the economy to pump or withdraw money. On the contrary, creating helicopter money deals with the contraction trap and involves a different type of transaction, as the probability is likely, as in the Japanese experience, that "permanent" bonds to be issued by the government at an interest rate of 0%, which the central bank buys and pledges to hold them forever without waiting for the government to pay them (Irwin, 2016, p. 3). Given the financing of helicopter money depends on creating non-refundable and non-refundable liabilities (money), it carries interest, therefore, it increases the net wealth of the private sector. Thus, as a final result, it will stimulate spending and nominal demand compared to the increase that can be achieved in the use of quantitative management tools. (Buiter, 2014, p. 36). It should be noted that when quantitative management tools are not useful in stimulating the economy and according to the views of the updated Keynesian economists, the economy has entered a liquidity trap that requires government intervention in the way of its spending, but this choice may not lead to good results, because the increase in government activity will lead to an increase in public debt, which will be clearly reflected in the effect of the Ricardian equivalent, i.e. increased tax deductions in order to bridge this debt in the future and assuming the rationality of individuals, they will choose to save instead of spending new money and as a result will not stimulate demand (Ryan-Collins & Van Lerven, 2018, p. 13).

It should be noted that within the helicopter money strategy, the central bank must issue an additional (M0) monetary basis that will increase its obligations without receiving valuable assets in return, which is the opposite of the quantitative management that the bank receives assets against the issue, at the same time the central bank's budget must be always balanced, and to solve that problem you must imagine that when following the helicopter money strategy, the central bank receives a hypothetical asset with a book value equal to the value of the money basis that was issued, but this asset has a market value of zero. The principal that meets these requirements is permanent bonds with a zero coupon, permanent, i.e. that it does not have a maturity date, and a zero coupon, i.e. there are no regular payments or even there is no promise to return them, meaning that these bonds have a book value equal to the issued money basis but they do not have a market value (zero), because no one will pay anything for bonds that do not make future payments (Dowd, 2018, pp. 149-150).

Variation Between Helicopter Money and Debt Monetization

There are several differences between debt monetization and helicopter money, although both lead to a new money issuance by the central bank, although debt monetization is the case that a government issues bonds and the central bank buys them generally, there are three important differences: (Dowd, 2018, pp. 152-153)

1 - In light of criticizing the public debt, there is a future promise to pay it and it has a positive market value. On the contrary, the default bond that is created under the money of the helicopter has no promise of future payment at all and has a market value of zero.

2- The second difference relates to who makes the decision and how much they should pay, according to monetization of the public debt. These decisions are taken by the government or its financial agents to achieve governmental financial goals, but in light of the helicopter money, these decisions are made by the central bank.

3- Finally, regarding political and legal restrictions, in light of monetary debt, it involves political costs represented by the fact that the call for expansionist policies by monetization can be criticized as being financially irresponsible, as well as a legal restriction represented by the existence of a legislative ceiling for the size of the debt, but in the helicopter money strategy it is possible to circumvent on these political and legal obstacles, which is a major argument put forward by the proponents of this method. However, the importance of this point remains, according to the reader's analysis, whether these restrictions are considered inappropriate barriers or protections.

The difference between the two strategies can be summarized through the Appendix (1) (Nangle, 2016, p. 6).

Helicopter Money and Health Shock (Covid 19)

The rapid spread of the Coronavirus in many countries presents a major challenge and shock to

their health systems. It has caused many human lives, partly due to the inability to provide appropriate intensive care to all patients who need it, and this has led many governments to try to slow the rate of infection through a number of measures, including quarantine in homes, restrictions to travel, close restaurants and theaters, suspend sports events, etc. Although these measures are necessary, they are bound to have a direct impact on the economy, as they operate through various channels. It will have a direct impact on production and sales in many sectors, where the activity will collapse partly or completely during the emergency, either as a result of the interruption of supply (due to lack of inputs, labor or otherwise), or as a result of decreased demand (due to the forced change in consumption patterns resulting from health-related measures). Thus, the direct loss of GDP is inevitable, given the course of action required to contain the spread of the virus. If it lasts for more than a month or two, it is imperative that it lead to a cumulative loss in output equivalent or greater than that witnessed in the last financial crisis. This direct loss in GDP, which will be largely reflected in the decrease in consumption of goods and services during the health crisis (Masciandaro, 2020, p. 3).

On the other hand, in order to continue covering other fixed expenses (such as rent and interest) during the period of economic downturn, by obtaining loans from banks. But banks may be reluctant to extend these loans, given the potential for default and the possible deterioration in their financial statements. A rapid and good response commensurate with the scale of the challenge is required to minimize the indirect economic impacts of the Corona Virus crisis. One of these responses is for governments to step in and provide affected companies (and freelancers) with the funds needed to continue to cover salaries and unavoidable expenses, without increasing their financial obligations. Ideally, this assistance takes the form of a transfer (non-reimbursable) during the compulsory economic downturn. One component of this net transfer should be the immediate (and permanent) tax credit. Unfortunately, such a strategy will only transfer the problem to governments, which need to increase taxes (and thus increase the burdens of families or companies) or borrow in capital markets and increase their debt burdens (and force them to increase taxes in the future).

Jordi Galí proposes to rely on helicopter money in light of this health shock which he considers an alternative to the strategy of increasing taxes and / or increasing government debt to finance the emergency financial program, which is direct, non-refundable central bank financing for the additional financial transfers that are necessary. Central banks have the ability to create money in the form of a currency or, and this is most important, in the form of credit for an account with the central bank. Usually, only banks and governments have an account with the central bank. In the current context, the central bank can limit the account of the government (or governments, in the case of the European Central Bank) to the amount of additional transfers and throughout the program period. This credit will not be paid, that is, it will be a transfer from the central bank to the government. From an accounting point of view, this strategy will involve reducing the capital of the central bank or creating a permanent item on the asset side of its balance sheet (Galí, 2020, p. 59).

Many specialists may consider that there is a loss of the independence of the Central Bank from the contents of the helicopter money, meaning that monetary policy is driven (at least temporarily) by the terms of the financial authority (financial domination), which is the clearest picture of the violation of the principle of the independence of the Central Bank. However, there are many historical indications that the rules deemed sacred in the face of unusual circumstances (such as the European Central Bank's decision to purchase government debt during the European debt crisis) were relaxed. In addition, the central bank may agree to voluntarily participate in such a plan, thereby preserving its official independence. Finally, regardless of legal issues, it is clear that the repeated use of these policies by governments may be a source of stimulus for inflationary pressures and changes in individual behavior that could undermine their effectiveness in the long run. However, this should not cause concern in the current context, because relying on money financing will be strictly limited to the duration of the emergency measures associated with the health crisis, which in theory, as Friedman pointed out, is an event that never happens once. Consequently, the application of these rules will preserve the reputation and independence of the central bank, which will have a positive impact by gaining public confidence in saving it from the harmful effects of deflation when necessary in light of the health shock represented by Covid 19. (Galí, 2020, p. 60).

Methodology

The research relied on the research questionnaire and opinion poll about the efficiency of adopting the helicopter money strategy by the Central Bank of Iraq and its repercussions on individual economic decisions that will clarify the extent of their applicability, that the research method is the inductive approach that searches in the private and moves to the year, and was adopted a number of financial statements and laws issued by the International Monetary Fund and the Central Bank of Iraq.

Results

A Look at The Iraqi Economy

The Iraqi economy is distinguished as a rentier economy that relies heavily on oil revenues, due to the deterioration of infrastructure and economic openness after 2003, and the suspension of most factories, workshops and other economic activities, which made the Iraqi economy closely linked to the global oil market when this market recovered, revenue was high and the budget has financial surpluses and vice versa, when the global oil markets deteriorate, the Iraqi economy will suffer from a decline in financial resources and face a fiscal deficit in the government budget, and economic problems appear at the level of macroeconomic variables. (Husseina, S. A., & Hamdanb,2020, p.131)

The global economy has suffered from two shocks since the beginning of 2020, one of which is represented by a sudden and dramatic decrease in oil prices, so that the price does not cover the cost of extraction, and the second shock is a health shock represented by the epidemic of Covid 19, which drained the economies in terms of emergency spending in terms of providing the necessary medical needs and paying social compensation, due to the stoppage of most of the commercial activities and economic activities due to quarantine cases in most regions of the globe, and the consequent costs of these expenses of finding urgent funding for them.

Appendix (2) represents the expectations of the International Monetary Fund for Iraq in light of the current crisis (IMF, April 2020, p. 23). It is clear from the table, and according to these expectations, that the real output growth in 2020 is - 4.7, as a result of the decline in the value of oil exports, and the shock of the decline in global economic activity as a result of corona virus after the actual growth rate in 2019 was 3.9, and it is also clear that the International Monetary Fund expects the recovery of economic activity in Iraq as a real economic growth of 7.2.

As for consumer prices, they are within acceptable limits, and within the global targeting by 2%, but in 2019, consumer prices expressed the existence of deflation, and the expectations for the years 2020-2021 are not more than 1%, and this indicates the tightening of the monetary policy of the Central Bank of Iraq by constantly combating inflationary pressures. By indicating the exchange rate and according to Law 56 of 2004 ("Law of Central-Bank of Iraq No. 56, 2004), which set the central bank with clear goals and foundations that cannot be overlooked, in particular not to lend to the government or buy its bond neither in the primary market nor even in the secondary. In other words, there were no signs of monetary debt to the government since 2004, which was reflected in a significant burden lifted from the general level of prices that could have been generated as a result of the possibility of lending to the government or buying its bonds.

As for the current account in 2019, it was suffering from an actual deficit of -1.2, and the expectations of the International Monetary Fund indicate that it rose to a rate of 21.7 for the year 2020, which is expected due to competition in the oil market witnessed in the beginning of 2020, and the lack of agreement between the producers on the shares offered in the oil market, which contributed to the deterioration of prices and the uncertainty that afflicted this market, which was reflected in the loss of many important resources and at the same time the decrease in the quantity exported, one of the causes of which was the health shock and the spread of an epidemic as a covid 19, which paralyzed the Chinese economy and affected its oil imports from Iraq and all the global activity it represented. It has a major role in it (Moghaddam, 22 March 2020, p. 2), which will make imports clearly outweigh exports, which are reflected in the current account imbalance.

Exploring the Possibility of Applying Helicopter Money by The Central Bank Of Iraq

Nature of The Study Sample

The poll included (647) individuals older than 18 years, and the participating age groups (18-30 years) were distributed as the largest participation rate, with 60.3% of respondents to other groups, which includes the largest number of unemployed, according to the World Bank's report for the fall of 2018 "Iraq Economic Monitor" (Cohesion, 2018), followed by 27.5% of the respondents in the 30-50 year category, while the age group over 50 years was the lowest participation rate in the survey with only 12.2% (Appendix 3).

As for the quality and quality of the sample represented by the academic achievement in Appendix (4), the sample was distributed as follows: 49.1% of the respondents participated in the bachelor's graduates, while 32.6% of the participants are holders of higher degrees (higher diploma, masters, doctorate), as for the participants in the survey from the secondary school campaign (middle school, middle school), it represented 17.8%, while those who participated in the survey do not have any academic qualification, it is a low percentage and almost does not mention 0.5% (3) participants only from the total sample total. It is clear from the distribution of the sample above that the quality is good and very much focused on university degree holders by more than 80%, meaning that the opinions that will be obtained are from the conscious and educated class.

Results and Contents of the Survey

The results of the survey will be analyzed through the questions posed to the participants, and the responses will be analyzed and analyzed to arrive at the end of the day to assess the possibility of following the helicopter money strategy:

- Imagine that you receive an amount of 300 thousand Iraqi dinars as a monthly grant through your bank account or in cash and for a full year from the Central Bank of Iraq, and you are not obligated to return them in the future and you have the freedom to do what you want with this received money, how will you use this money?

The main question for the survey revolves around receiving an amount of 300 thousand Iraqi dinars as a monthly grant for a year, the reason for choosing this amount of money is the lowest possible income, at a daily rate equal to 10 thousand Iraqi dinars and it is the necessary subsistence income, and the amount as a grant is not obligated to the recipient to return it in the future. It is assumed that this amount represents the helicopter money in the form of social transfers from the central bank or by the government after transferring the amounts to its bank account by the central bank.

The important issue is the extent to which the nominal amount is stimulated in the economy by these transfers, which depends mainly on how to dispose of this amount, where the choices were (spending the amount on consumption, investing it, saving it, paying back previous debts, or the uncertainty of the recipient how to treat this transferred amount), and the answers were worthy of attention, especially since we already know that 60% of the respondents are youth (18-30), which is characterized by a tendency to marginal consumption for high consumption compared to other age groups. Appendix (5) shows the results of the survey, so 27.5% of the respondents decided that they would save the amount, while 33.1% decided that they would invest this amount. In fact, despite the small amount in total for a full year, it is approximately 3.5 three and a half million, the largest percentage believes that the investment decision is the most reasonable, and it must be noted that these investments are small and may be the purchase of some shares in order to obtain a profit rate or participate in some small business projects (Wang, 2002). It can be said that they are short-term investments that can move the nominal demand in the short term. As for those whose consumer decision was to spend the amount on purchasing goods and services, 23% of the participants, and this category represents a clear and direct addition to the nominal total demand, while 18.7% of the participants were their decision to pay and settle previous debts, which is a relatively large percentage and indicates that there is compulsory unemployment among the working class, especially since we have previously indicated that 60% of the participants are young and 80% of university graduates. As for 6.3%, they are not sure of their decision if these money amounts are received (Appendix 5).

- Result (1):

The above percentages show that 56% of those who will receive the helicopter money will activate the nominal demand in the market, and this ratio is distributed between explicit consumption as a direct demand for goods and services and the investment that we indicated is a very small investment commensurate with the amounts transferred to the public, because the sums are transferred in their entirety for a full year will not help the receiving individual to purchase a fixed asset (for example, a car, residential land, etc.), due to the small amount of these amounts. This percentage indicates that the helicopter money will contribute to stimulating the total demand and moving the economy according to its response to that request.

As for a quarter of the amounts transferred, approximately 27.5% will go to saving, the role of saving is negative in achieving the goal of helicopter money and to be effective in stimulating the economy, because the money will be booked away from spending and therefore do not stimulate total nominal demand, generally the percentage is acceptable and not high, and from an analysis of the nature of the sample, it is the largest age group, because their consumption preferences are less than the youth class or they have a stable resource in advance so they will direct any net income addition to wealth to savings.

As for the percentage of 18.7%, they are the participants who benefit from the helicopter money in settling previous debts, and this percentage is relatively large and means that there are many young people and university graduates are obliged to borrow and borrow (because they are the largest percentage of the participants), in order to face their simple spending, in general the closest belief to these amounts paid it will contribute to pushing the economic activity, because its nature is consuming either by buying in debt or by installments for some needs that represent an urgent necessity such as mobile devices or face emergency spending, expecting these amounts to be a large percentage of them appear as financing for small commercial activities or as an additional individual request in the economy.

As for the 6.3% of the participants are not sure how to deal with these amounts, it may appear in any of the above forms.

The summary of the first result is that helicopter money will have a clear role in stimulating nominal demand in the economy and contribute significantly to fighting deflation because it targets individual economic units and aims to raise the cap of individual consumption by increasing the net wealth of individuals, and it can be highly effective by targeting the category with the marginal propensity to consume, which is the category 18-30, as well as targeting groups without fixed income and those who do not have continuous employment, these translate any transfer of amounts into individual demand in the market and the result is the efficiency of monetary policy in stimulating economic activity.

- What do you think about the effect of the 300 thousand dinars grant on the general level of prices and the rate of economic growth if it was actually followed by the Central Bank of Iraq?

As for the second and third question, the sample's expectations for the reflections of helicopter money on the general level of prices were the expectation of a 49% increase, that it remained unchanged by 34%, and an expectation of a decrease of 6% only, while 12% of respondents did not know and unsure about how this grant affects the general level of prices. In fact, it is almost acceptable and fair expectations (Appendix 6).

As for the effects of the grant on economic growth, the expectations of the participants were that there is a significant positive impact on economic growth by 60%, and only 14% expected that there will be a negative impact on economic growth, while those who indicated that it would be without influence on economic growth are approximately 21%, or for individuals who are not sure of the implications for economic growth, they are only 5.4% (Appendix 7).

- Result (2):

From the above it is clear that there is a belief that the general level of prices will increase by 50% in conjunction with the belief that economic growth will occur by 60%, and this coincides with the economic logic that economic growth may lead to an increase in inflation but will be acceptable, and evidence of economic history that governments have accepted that inflation occurs, against achieving economic growth and reducing unemployment rates, which was indicated by the Phillip's curve of an inverse relationship between inflation rates and unemployment rates, which on the other hand means a direct relationship between the rate of economic growth and the rate of inflation, which was proven (Mallik & Chowdhury, 2001), in addition to his conclusion that the sensitivity of inflation to the change in the rates of economic growth is greater than the recent sensitivity of the changes in the rates of inflation.

In general, the high prices that are likely to be generated from the money of the helicopter in Iraq

is not permanent for two reasons. The first, according to the survey, inflationary expectations are moderate for individuals and are largely equivalent to the possibility of economic growth. Often, it will disappear after the economic sectoral structure responds to this demand, either through stock or production, with signs in the recent period of improvement in some productive aspects, especially agricultural products, dairy and foodstuffs, which we have reached in some of them to self-sufficiency, on the other hand, from the reality of the Iraqi economy, the rate of inflation will not exceed the one decimal place threshold with the role of the Central Bank of Iraq after 2004 until now in fighting inflationary pressures and keenness to be of one decimal place through its new tools, especially the exchange rate indication represented by the currency auction (Thwaini & Hamdan, 2017, p. 150).

- What is your assessment of the Central Bank of Iraq policy in the event followed the above procedure

The results of the poll came about assessing the performance of the Central Bank of Iraq if it applied the helicopter money strategy as shown in Appendix (8) on a scale (1-5) and to clarify (1 = bad performance, 2 = acceptable performance, 3 = good performance, 4 = very good performance 5 = excellent performance), and the fact that the evaluation was upward, he obtained a good evaluation of approximately 35%, an excellent performance of approximately 25%, and 21.3% of the sample evaluated the Central Bank policy very well, meaning that the assessments (good, very good, excellent) acquired a percentage exceeding the 80% barrier.

- Result (3):

The results that were referred to above on the evaluation of the performance of the Central Bank of Iraq are evidence of public confidence in the performance of the Central Bank of Iraq and this trust was built primarily after 2004 and the bank's attempt not to submit to political pressure and fight inflation and the use of its tools freely and impartially and there may be some criticism of the supervisory role of the bank by some specialists, but this does not mean that the public does not trust. This is what experimental studies in the monetary field indicated to him that proved that there is an inverse relationship between confidence in central bank actions and inflationary expectations, meaning that the more confidence in monetary policy and procedures increases, the ceiling of individuals' expectations of inflation will decrease because they believe that the central bank aims to achieve the public interest always (Christelis, Georgarakos , Jappelli, & Van Rooij, 2020).

Therefore, the evaluation of the poll sample for the performance of the Central Bank of Iraq if the helicopter money is applied is very important and gives a positive impression in order to apply the helicopter money and coincide with the previous results to give in the end a clear positive for the helicopter money instructed to contribute to ending the economic downturn.

- Did you know that the Central Bank of Iraq is not entitled to purchase Iraqi government bonds in accordance with the Central Bank Law 56 of 2004?

Finally, the survey on the extent of knowledge that the Central Bank of Iraq law prohibits the purchase of government bonds in the primary market and prevents lending to them with any kind of facilities directly or even to government-owned banks and is limited to buying in the secondary market through open market operations ("law of Central-Bank of Iraq" No.56, "2004, p. 22) supply, demand and just the necessity of intervention for example achieving the goal of stabilizing the general level of prices and secondarily driving economic growth, the proportion was interesting to approach 75% by not knowing about it, that is, they do not know that quantitative management tools are not applicable.

- Result (4):

The media role of the Central Bank of Iraq is weak and did not reach the simple person, even though the survey sample included the class of university graduates with a very large percentage, and this is not commensurate with the lack of knowledge of an explicit and detailed paragraph of the Iraqi economy, knowing these laws increases confidence in the Central Bank of Iraq by introducing a private media channel or reserving advertising space on one of these channels, which in turn will contribute to raising the degree of transparency and credibility of the central bank, which is important and a key component of successful central banks.

Conclusion

Helicopter money mechanism may be appropriate, especially with the expectations of the International Monetary Fund that it is a temporary crisis and will end at the end of this year, which

is commensurate with the specificity of the helicopter money strategy, which should be temporary. With the results mentioned above, it is clear that the application of this strategy will have positive repercussions that increase the possibility of overcoming the state of economic contraction and avoiding a recession that may lead to long-term negative results.

It do not forget that the Central Bank of Iraq is a public institution looking for the realization of the public interest, and that the application of this strategy with the above data will avoid the Iraqi economy big and huge losses if it is not confronted with the appropriate form and time, those losses will include all the foreign reserves that the Iraqi Central Bank has, because the flow of it to the exchange market will not be proportional to the amount of injections from Iraqi oil exports, the deterioration of per capita income, the government's inability to finance employee salaries, as well as the deficit in paying public debt and other manifestations of economic failure.

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Appendix (1)

Comparison between quantitative management, helicopter money, and quantitative management accompanied by financial expansion

	quantitative management (QM)	helicopter money (HM)	management financial expansion (QM FE)
Where does the money go?	It goes to banks and financial institutions that sell bonds to the central bank	It goes directly to consumers and the family sector	
Monetary impact	External monetary increases according to the duration of the quantitative management program	Permanent increases in foreign exchange	External cash increases depending on the program duration
How to stop the policy when the time comes?	Selling assets, or increasing short-term interest rates are both	Increase financing costs, and end helicopter money transfers	Selling quantitative management assets and increasing finance costs
Economic impact	Hypothetically, it has a positive effect, but the reality has proven to be ineffective	If done with coordination of financial spending, it would stimulate the economy and help it recover faster	If it is accompanied by coordination with financial spending, it will stimulate economic activity.
Market impact	Low discount rate, low currency exchange rate, reduced asset risk, if accompanied by coordination with financial spending, would stimulate economic activity.	Not known	Low discount rate, low currency exchange rate, reduced asset risk

Source: Nangle, T. (2016). How Helicopter Money Works. Columbia Thread Needle Investments Viewpoint (May).

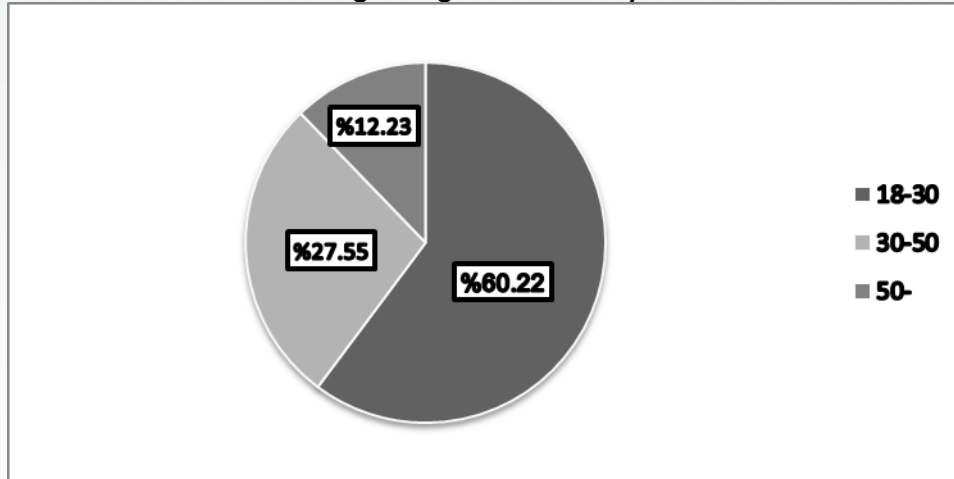
Appendix (2)

real output, consumer prices, and current account

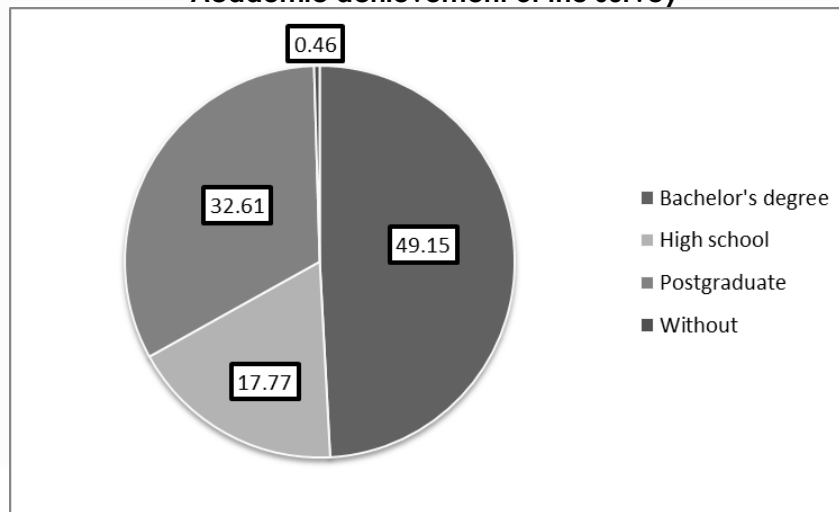
Years	Current account	consumer prices	real output
2019 (actual)	-1.2	-0.2	3.9
2020	-21.7	0.8	-4.7
2021	-14.1	1.0	7.2

Source: (IMF, April 2020, p. 23).

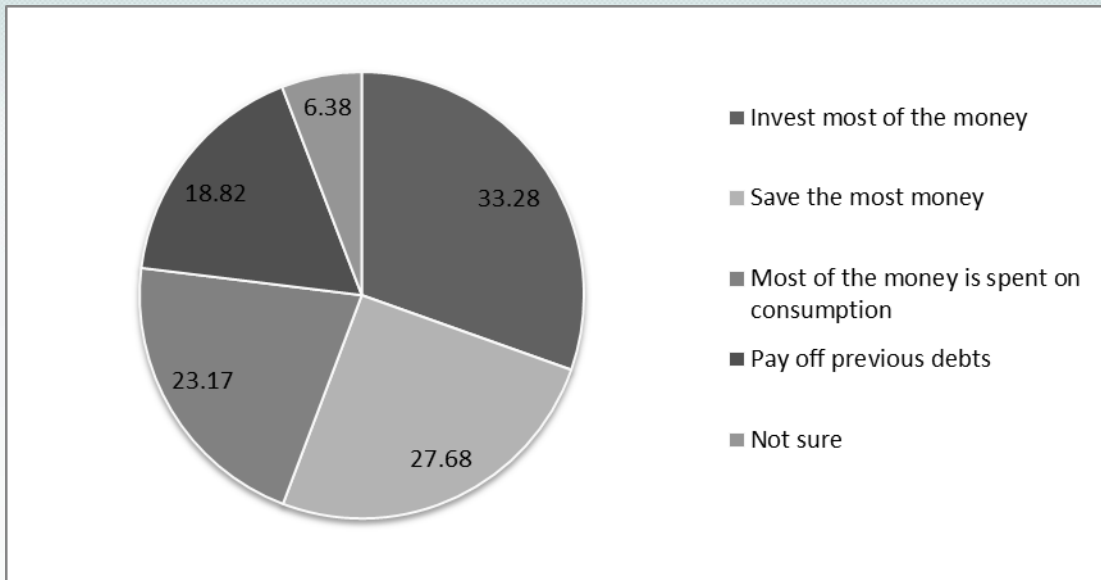
Appendix (3)
Age range of the survey



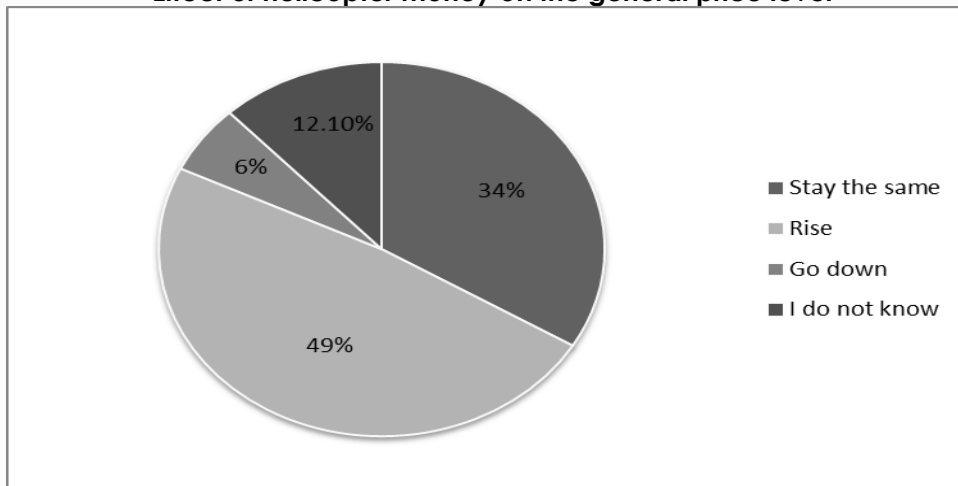
Appendix (4)
Academic achievement of the survey



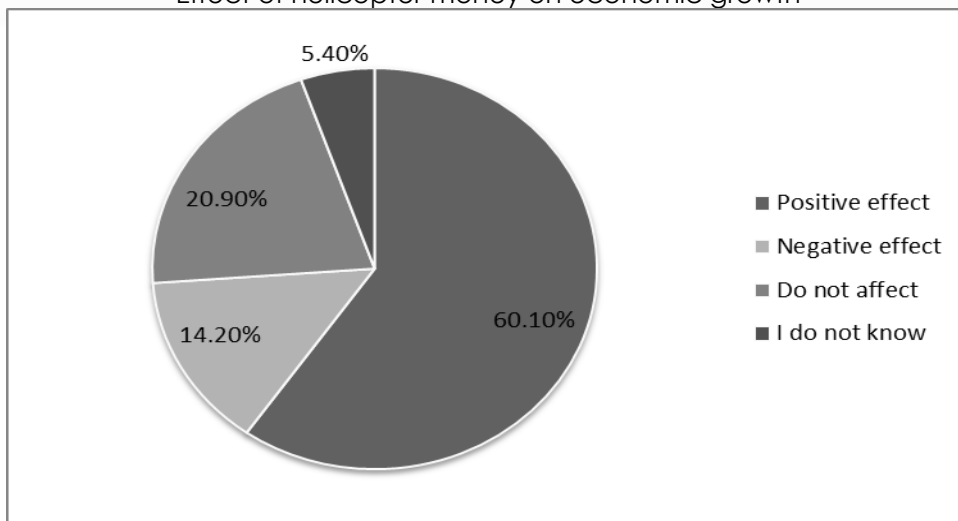
Appendix (5)
How to spend helicopter money



Appendix (6)
Effect of helicopter money on the general price level



Appendix (7)
Effect of helicopter money on economic growth



Appendix (8)
Evaluation of the helicopter money strategy

