Investigating the Economic Growth Response of Developing Countries to Shocks Caused by Financial Development and the Accumulation of Human Capital

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Abstract: The aim of this study is to investigate the reaction of the economic growth of developing countries against the shocks caused by financial development and the accumulation of human capital in 2019. The research method is applied in terms of purpose and semi-experimental in terms of data collection method and post-event approach (through past information) and descriptive-correlation research type is used. The statistical population of the study includes all the countries of the Middle East, of which 14 countries are considered as the sample size using the target-oriented sampling method among the countries of the Middle East during the period 2010-2013. In this study, to collect data and information, the library method is used based on published documents and reports. In the research data section, by collecting the data of the sample companies, it is done by referring to the financial statements, explanatory notes and the monthly stock exchange monthly. Descriptive and inferential statistics are used to describe and summarize the collected data. In order to analyze the data, first the variance inequality pre-tests, F-Limer test, Hassmann test and Jarque–Bera test and then multivariate regression test are used to confirm and reject the research hypotheses (Eviews software). The research results show that financial development, human capital development, inflation, economic openness and foreign direct investment have an impact on the economic growth of selected countries, but the impact of government spending on economic growth of selected countries is not confirmed.

Keywords: Financial development, inflation, open economy, foreign direct investment, economic growth, Government spending.

Introduction

Today, human resources are considered as the most valuable and important organizational resources that can lead to strengthening the competitive advantage of the organization over other organizations (Rouhi, 2017: 5); in other words, effective human resources are one of the most important assets. They are intangible in the organization and the economic growth of the organization depends on their empowerment (Mattis, Jackson, Valentine and Maglich, 2016: 15), on the other hand, one of the most important issues in developing countries is the issue of economic growth; Economic growth is the study of the determinants of growth in different countries. Thus, one of the most important issues discussed by economists from the mid-1950s to the late 1960s was the issue of economic growth, so that during these years several theories were presented on economic growth, the most famous of which was the theory of neoclassical growth. Neoclassicists have shown that by assuming a steady rate of return on production without technical advancement and the supply of productive labor, the rate of economic growth is determined by the growth rate of labor, neoclassicists using a production function in macroeconomics showed how the growth rate of factors of production Work and capital in the long run can be determinants of growth (Mehrab Kali, 2012); therefore, financial development occurs when the

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ability of the financial market to perform these tasks develops and improves the decision to save and invest. Eventually, it will lead to economic growth (Akbarian and Heydaripour, 2009).

Patrick (1966) argues that the relationship between financial development and economic growth depends on the development of each country. In the early stages of development, improving financial services and expanding new financial instruments and changing the financial structure will lead to economic growth. But as economic development continues, financial developments will follow the demand for it, and demand for newer types of financial instruments and services will be decisive. Experimentally, there are four possible states: 1) Financial development is the cause of economic growth. 2) Economic growth is the cause of financial development. 3) Financial growth and development affect each other as partners. 4) Financial growth and development have nothing to do with each other (Motmani, 2009), which in the present study, the relationship between financial development and economic growth is considered.

On the other hand, in the serious economic literature, human capital or skill and education is considered as the fourth factor of production, which also includes the art of management. Of course, in addition to human capital, intellectual or spiritual capital and social capital have also been mentioned, the first of which refers to information technology and the second to social resources such as social trust or economic activity (Godion et al., 2005). Today's analysis distinguishes between tangible, physical, or non-human capital goods and human capital. Human capital is obtained through education. Thus, education is considered a key element in the accumulation of human capital and economic growth. Human capital is the set of knowledge and skills accumulated in the human need of an organization. Human capital requires the investment of human resources in a set in order to increase their efficiency. From a macroeconomic point of view, the effectiveness of knowledge input is reflected in the share of knowledge input in GDP. In other words, if the share of knowledge in GDP is increasing, it indicates the gradual establishment of a knowledge-based economy in a country (Nobakht et al., 2012).

Therefore, considering the importance of studying the reaction of economic growth of developing countries, especially in the face of shocks caused by financial development and accumulation of human capital, and considering that limited research has been done in this regard, the aim of this study is to examine the growth reaction. The economies of developing countries are facing the shocks of financial development and the accumulation of human capital. In fact, companies operating in the Middle East need to respond to the economic growth in the face of shocks in order to gain and improve their global standing and, in addition, achieve their goals mentioned earlier. Financial development and the accumulation of human capital should be focused on it, so in this study, an attempt has been made to investigate the issue of examining the reaction of economic growth of developing countries against the shocks caused by financial development and accumulation of human capital. Whether the economic growth of developing countries in the face of shocks caused by financial development and its collapse, Does human capital react?

The Theoretical Framework of the Research
In this section, we review the existing literature on three areas of economic growth in developing countries: the shock of financial development and the accumulation of human capital:

Financial Market Development: Special attention has been paid to the concept of financial development after the introduction of the concept of financial repression in the 1970s. In other words, the free influence of banks and credit institutions has become more important in regulating the real value of financial instruments and the possibility of broader participation of traders with these instruments. Financial development is measured in terms of the development of financial markets, including the money market and the capital market with different dimensions. These dimensions include the development of the banking sector, the development of the non-banking financial sector, the development of the monetary sector and monetary policy, banking regulations and supervision, the openness of the financial sector and the institutional environment. According to studies, financial development is a multifaceted concept that in addition to the dimension of bank money, other
dimensions and components such as financial freedom, quality of regulations and supervision in this sector, technological advances, competition and existing institutional capacity. Also included. A country's financial structure is made up of different markets and financial products, and limited finance cannot cover all the necessary aspects of financial development.

The development of the country's financial market is an undeniable necessity, considering the global developments, especially in the financial markets. However, given that theoretical literature on economic growth (endogenous and exogenous growth models) as well as empirical evidence in developed and developing countries, sustainable development is impossible without financial development. In Iran, considering the macroeconomic characteristics and micro-characteristics of households and economic enterprises on the one hand and regional developments on the other hand, regulating Iran's financial structure in proportion to the rate of economic growth and income distribution is inevitable. The savings from rising asset prices in Iran have significantly affected the distribution of wealth and welfare, mainly in favor of a particular group, and have increased demand for goods and services (such as housing, cars and durable goods) and sometimes The shock has hit the economy's quadruple markets. In this regard, the savings that are invested in the housing sector with increasing wealth, has focused on increasing consumption and total demand in society at the household and institutional levels, and in this way has affected the ultimate goals of monetary policy (economic growth and inflation). In this case, the development of money and capital markets in the framework of the flexible financial structure in the country could have accelerated economic growth to a greater extent in attracting savings due to the performance of economic activities and sometimes high profits due to imbalances in markets, accelerating economic growth, because according to the assumptions and principles to These markets play a significant role in allocating resources to profitability projects. Transparency, risk management and ultimately increase the efficiency of investment. Also, in case of growth of financial assets of households and institutions, it is predicted that in case of growth of financial assets, the value of households and value added capital of investment institutions will increase consumption and consumption. It is necessary to establish the necessary coordination between the capital market and the money market by designing an appropriate financial structure, in order to create maximum efficiency in achieving the goals of monetary policy. Table 1 shows the components of financial development in Iran and some selected countries in the Middle East in 2010.

<table>
<thead>
<tr>
<th>Country</th>
<th>Banking sector</th>
<th>Non-banking financial sector</th>
<th>Legislation and supervision</th>
<th>Monetary sector and monetary policy</th>
<th>Accessible financial sector</th>
<th>Institutional section</th>
<th>Financial integrity index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>1.8</td>
<td>3.1</td>
<td>4.8</td>
<td>0.6</td>
<td>4.1</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Emirates</td>
<td>7.8</td>
<td>5.2</td>
<td>6.6</td>
<td>5.8</td>
<td>8</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Qatar</td>
<td>6.9</td>
<td>0.6</td>
<td>6.6</td>
<td>5.9</td>
<td>8</td>
<td>6.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Algeria</td>
<td>2.6</td>
<td>3.2</td>
<td>3.6</td>
<td>4.5</td>
<td>3.9</td>
<td>2.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>5.8</td>
<td>6.3</td>
<td>7.7</td>
<td>7.4</td>
<td>4</td>
<td>3.9</td>
<td>6</td>
</tr>
<tr>
<td>Egypt</td>
<td>6</td>
<td>6.3</td>
<td>5.2</td>
<td>5.6</td>
<td>6.2</td>
<td>3.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Oman</td>
<td>6.1</td>
<td>5</td>
<td>8.4</td>
<td>4.1</td>
<td>8</td>
<td>5</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund

Economic growth: In simple terms, economic growth is the increase in a country's production in a given year compared to its value in the base year. At the macro level, the increase in gross domestic product or gross domestic product in the year in question is economic growth relative to its value in the base year. The reason that basic year prices are used to calculate economic growth is that the increase in GDP is due to an increase in production and the effect of rising prices (inflation) is eliminated.

Foreign Direct Investment: The percentage of shares held by foreigners is the total capital of the company. That includes foreign partners, foreign financial institutions, foreign nationals and non-Iranians. Foreign direct investment is typically made in the form of investment in production,
manufacturing and extraction of raw materials, and countries welcome it to fill the gap between national savings and investment, access to technical knowledge, and eliminate currency bottlenecks. The World Trade Organization defines direct foreign investment as: when an investor residing in one country (country of origin) buys an asset in another host country with the intention of managing that asset. Foreign direct investment occurs. It should also be noted that foreign investment in the financial portfolio includes all investments of a legal entity residing in one country, in the bonds of one enterprise residing in another. This company primarily seeks to raise the capital it needs and does not need to return significant and sustainable profits to the investor. All investments in the field of participation bonds and promissory notes are considered an indirect type of investment (Farzin, 2012). Having a clear framework for foreign direct investment in countries has lost its importance due to the expansion of free trade and globalization. Countries’ tools for attracting foreign direct investment include rules and regulations that determine how capital and foreign investors behave, the performance standards of affiliated foreign companies, and the performance of markets. Some of the various effective factors for attracting foreign direct investment are known as political, economic, geographical, and supportive and incentive. For example, in economic factors, issues such as the existence of extensive economic infrastructure, openness of the economic system, etc. are examined, or in supportive and encouraging factors, issues such as tax exemptions, infrastructure facilities, etc. are discussed (Farhad, 1390).

Economics Openness Index: To calculate this index, the ratio of total exports and imports to GDP is used. Exports and imports through expertise, knowledge transfer, and technology can have a positive impact on economic growth, but if increased trade volume is only based on the export of raw materials and imports of imported goods (economic goods can grow). Shahbazi and Saeedpour, 2013).

Human Capital: Human capital is considered as a strategic factor and includes all individuals and human resources working in the organization who, in return for receiving specific salaries, work to achieve the goals of the organization under the management of management (Nobakht et al., 2012).

Inflation: Inflation is a steady increase in the general level of prices of goods and services, which ultimately leads to a decrease in purchasing power and economic turmoil (Date and South, 2015).

Government Expenditure: Government expenditures can be classified in the form of payments to employees or the purchase of goods or repayment of previous loans, as well as transfer payments such as subsidies or payments to retirees (Mahdavi Tabar, 2009). One of the main criteria for measuring the role of government is the amount and composition of government spending. But changes in the government's absolute spending alone cannot reflect this, but it must be measured in terms of government spending relative to an economic indicator. For example, if the figures show that government spending has increased by 50 percent in ten years, can it be claimed that the government's role in the economy has increased? Definitely not, because if we consider this change in the nominal costs of the government, the increase in prices at the same time will not only double the actual increase in government spending, but also reflect the depreciation of real costs (Adibi Kho, 2006).

Research Background
Following the review of studies and research related to the subject from various sources such as universities and centers providing and preparing scientific and research resources, confirm that inside Iran research on this subject is very small but relatively similar, so in each Which of the following, with differences and similarities, have been studied on the subject and the relevant results have been used in a specific time and place, which are:

The results of Noor et al. (2016) and Ismail et al. (2016) research showed that the development of financial markets has a positive effect on economic growth. Pardan et al. (2016) found that the ability to innovate and develop the financial sector has a positive effect on long-term economic growth. Kim et al. (2015) have stated that banking development increases human development, but its impact on non-governmental business units is stronger. The results of a study by Abdul Islam et al. (2015) show that private bank credits and domestic bank credits have a significant impact on the economic growth of West African countries, both of which directly affect capital accumulation. Also, the results show that
both of these credits to individuals and companies, through appropriate financial policies, lead to increased and encouraged economic growth. Chong and Lem (2011) have stated that foreign direct investment has a significant negative impact on economic growth. In the later stages, different countries were divided into three groups according to their income: Foreign direct investment had a positive effect on the economic growth of high-income countries. Foreign direct investment has had a significant negative impact on the economic growth of middle-income countries. Although foreign direct investment has had a negative impact on some regressions, it has had a positive effect on all regressions in terms of financial development. The findings of Azman et al. (2010) showed that when the development of the financial market increases to a certain extent, the impact of foreign direct investment on economic growth will be positive. James (2008) found that financial development has been achieved through increased savings and private investment in Malaysia through high economic growth. The results of his study also confirmed the endogenous hypothesis of financial development and growth, based on the fact that financial development has been achieved by increasing the efficiency of investment through economic growth. Suleiman and Amer (2007) proved the relationship between financial development and economic growth in the country. According to them, financial development through increasing resources for investment and increasing the efficiency of investment will lead to economic growth in this country. According to Ritab (2007), there has been a long-term balance between the development of the financial sector and economic growth in the seven countries studied, but in the short term the development of the banking sector has not had a significant impact on economic growth in these countries. The results of a study by Leo and Soo (2006) in Taiwan, Korea and Japan showed that a high investment would accelerate economic growth in Japan and would not necessarily lead to better growth if investment was not efficiently allocated, such as Korea and Taiwan. B. Financial development has a positive effect on the Taiwanese economy, but has a negative effect on the Korean and Japanese economies. C. The development of the stock market has a positive effect on the Taiwanese economy. D. The Asian maritime economy can have a negative impact on Korea and Japan. E) The withdrawal of capital from these countries has a negative impact on their economy, while the inflow of capital also has a negative effect, but it is not significant. Ransey et al. (2006) showed that the classical model of economic growth is significant for variables such as inflation, economic openness, population growth and government size, and agrees with monitoring, but the effects of liberalization of financial markets and capital flows have a positive effect on economic growth. It loses itself largely due to crises and the indirect effects of it.

Inside the country, Ebrahimi et al. (2016) have found that the qualitative development of the financial system will reduce the level of per capita capital. At the same time, the optimal level of the ratio of legal deposits in the Iranian banking system can be inferred. According to Rahmani and Mazahi Marbari (2014), the perspective of migration has a positive and significant effect on the accumulation of human capital, and therefore the motivation mechanism that has been emphasized in the new literature is confirmed. Also, actual migration itself has a negative effect on the accumulation of human capital in each period. In the next step, the effect of migration of experts on economic growth was examined. The results showed that the effect of migration of brain drain on economic growth of the country is negative. The results of Abu Nouri and Teymouri (2013) show that financial development has a negative and significant effect on the economic growth of selected countries, and since the member countries of the Organization for Economic Cooperation and Development have a higher level of development, the intensity of this effect is smaller for these countries. Also, the effect of other variables includes government size, inflation and per capita real GDP, investment and openness of the economy in accordance with theoretical expectations. Soltani (2013) has stated that the variable of financial depth has a positive effect on economic growth, which can be due to the fact that by reducing interest rates, the government has given investors the opportunity to expand their activities at a lower cost and thus the volume of investment. Rising and increasing investment has led to increased economic growth. With increasing share of production from investment, economic growth will increase because with increasing production, gross domestic product has increased, which means that economic growth has increased. Samadi et al. (2007) examined the relationship between financial market development and economic growth in Iran and 13 selected countries during the years 1988-2008. Estimates of causality test between stock market size and production growth show that in Iran Bank and stock exchange do not have a
significant impact on GDP growth, but the impact of economic growth on the stock market is positive and significant. In short, the long-term relationship between the money market and economic growth is negative, and there is no significant long-term relationship between the capital market and the country's economic growth.

From the above background, it seems that the study of the reaction of economic growth of developing countries can be effective against the shocks caused by financial development and accumulation of human capital, so given that developing countries annually a lot of material and non-material losses from not reviewing The response to the economic growth of developing countries in the face of the shocks of financial development and the accumulation of human capital at its various levels has been met with a fundamental weakness and challenge in the strategic document of strategic development and decision. To conduct a scientific and educational research for the pathology of the above subject and the main scientific solutions to solve this been challenged. So based on what was said recommended that the following hypotheses:

**Hypothesis**: The economic growth of developing countries reacts to shocks caused by financial development and the accumulation of human capital.

1. Financial development affects the economic growth of selected countries.
2. The accumulation of human capital affects the economic growth of selected countries.
3. Inflation affects the economic growth of selected countries.
4. The degree of openness of the economy affects the economic growth of the selected countries.
5. Foreign direct investment affects the economic growth of selected countries.
6. Government spending affects the economic growth of selected countries.

According to the conceptual framework and research hypotheses, the conceptual research model is as follows:

![Conceptual Research Model](image)

**Research Methodology**

The research plan of this research is semi-experimental and using a post-event approach (through past information). On the other hand, the present study is a descriptive-correlational research. Based on the nature of the data, the type of research is small. Based on the objectives, it is also considered as an applied research type and regression test is used to study the research hypotheses and considering the nature of the information and research data which is based on quantitative and real information of the past. Research regression model:

\[\text{GDP}_{it} = \beta_0 + \beta_1 \ln \text{BCR}_{it} + \beta_2 \ln \text{DC}_{it} + \beta_3 \ln \text{HCD}_{it} + \beta_4 \ln \text{CPI}_{it} + \beta_5 \ln \text{OPN}_{it} + \beta_6 \ln \text{FDI}_{it} + \beta_7 \ln \text{TGE}_{it} + \epsilon_{it}\]

- Economic growth of GDP (dependent variable): The difference between GDP this year compared to the previous year
• Financial market development (independent variable): Bank credit (BCR): The ratio of bank payments to private sector as a percentage of GDP.
• Domestic credit (DC): Domestic credit by the private sector as a percentage of gross domestic product.
• Human Capital Development HCD (Independent Variable): The Human Development Index is one of the three main indicators of life expectancy at birth, education and real GDP per capita in terms of purchasing power parity with equal weight. The number obtained from the Human Development Index is a number between zero and one, which can be used to determine the position and ranking of human development in different countries and regions.
• In which: EL: Life expectancy at birth; EDL: Education and GDPI: GDP per capita in terms of purchasing power parity
• FDI foreign direct investment (control variable): the ratio of foreign investment to GDP
• OPN (openness variable) economy openness index: the ratio of total exports and imports to GDP
• CPI inflation (control variable): The inflation rate is calculated using the country’s annual statistics.
• TGE Government Cost (Control Variable): The ratio of government spending to GDP

The statistical population of the study included all the countries of the Middle East, among which, using the targeted sampling method among the countries of the Middle East during the period 1389-1393 was considered as the sample size. In order to collect the data required for this research, compact financial information tablets of companies published by Tehran Stock Exchange Organization, which includes annual financial statements and explanatory notes of audited financial statements, as well as Tehran Stock Exchange website, have been used.

Data Analysis
Test models and research hypotheses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimated Coefficients</th>
<th>Estimation of Deviation</th>
<th>T Statistic</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.291</td>
<td>0.225</td>
<td>1.293</td>
<td>0.0762</td>
</tr>
<tr>
<td>Bank Credit</td>
<td>0.603</td>
<td>0.132</td>
<td>4.568</td>
<td>0.0298</td>
</tr>
<tr>
<td>Internal Validity</td>
<td>0.715</td>
<td>0.281</td>
<td>2.544</td>
<td>0.0415</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>0.398</td>
<td>0.351</td>
<td>1.133</td>
<td>0.0414</td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.641</td>
<td>0.111</td>
<td>-5.774</td>
<td>0.0187</td>
</tr>
<tr>
<td>The Degree of Economic Accessibility</td>
<td>0.555</td>
<td>0.091</td>
<td>6.098</td>
<td>0.0096</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>0.263</td>
<td>0.026</td>
<td>10.115</td>
<td>0.0021</td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>-0.218</td>
<td>0.201</td>
<td>-1.084</td>
<td>0.0675</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>C.V.</td>
<td>Adjusted C.V.</td>
<td>F Statistic</td>
<td>Sig.</td>
</tr>
<tr>
<td>2.1</td>
<td>0.64</td>
<td>0.63</td>
<td>36.15082</td>
<td>0.000**</td>
</tr>
</tbody>
</table>

Sig. level 5% and ** Sig level 1%

According to the table above, the Watson camera statistic is 2.1, indicating that there is no correlation between errors because it is between 1.5 and 2.5. The adjusted coefficient of this test is 0.63, which shows that the independent and control variables in the present model can predict 63% of the changes in the dependent variable (economic growth). Due to the significance of the F statistic at the error level of 1%, it can be said that the research model is statistically significant and appropriate; therefore, the final research model is presented as follows:

\[ \text{Ln GDP}_{it} = 0.291 + 0.603 \ln \text{BCR}_{it} + 0.715 \text{DC}_{it} + 0.398 \ln \text{HCD}_{it} - 0.641 \ln \text{CPI}_{it} + 0.555 \ln \text{OPN}_{it} + 0.263 \ln \text{FDI}_{it} + \epsilon_{it} \]
The summary of the research results is as follows:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial development affects the economic growth of selected countries.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>2</td>
<td>The accumulation of human capital affects the economic growth of selected countries.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>3</td>
<td>Inflation affects the economic growth of selected countries.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>4</td>
<td>The degree of openness of the economy affects the economic growth of the selected countries.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>5</td>
<td>Foreign direct investment affects the economic growth of selected countries.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>6</td>
<td>Government spending affects the economic growth of selected countries.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

The estimation coefficient of the bank credit variable on economic growth is 0.603, which shows that there is a positive and direct relationship between the bank credit variable and economic growth, that is, with the increase of bank credit, economic growth also increases. Also, the estimation coefficient of the domestic credit variable on economic growth is 0.715, which shows that there is a positive and direct relationship between the domestic credit variable and economic growth, that is, with the increase of domestic credit, economic growth also increases. Because the significance level of t-statistic of independent research variables is lower than the error level of 5%, the positive and significant effect of financial development on the economic growth of selected countries can be confirmed with 95% confidence. The estimated coefficient of human capital accumulation on economic growth is 0.398, which shows that there is a positive and direct relationship between the variable of human capital accumulation and economic growth, that is, with the increase of human capital, economic growth also increases. Because the significance level of t-statistic independent of the research variable is lower than the error level of 5%, the positive and significant effect of human capital accumulation on the economic growth of selected countries can be confirmed with 95% confidence. The estimated variable of inflation on economic growth is -0.641, which shows that there is a negative and inverse relationship between the variable of inflation and economic growth, that is, with increasing inflation, economic growth also decreases. Because the significance level of t-statistic of the independent variable of the study is lower than the error level of 5%, the negative and significant effect of inflation on the economic growth of the selected countries can be confirmed with 95% confidence. The estimated coefficient of economic variability on economic growth is 0.555, which shows that there is a positive and direct relationship between the variability of economic openness and economic growth, that is, with increasing exports and imports, economic growth also increases. Because the significance level of t-statistic independent of the research variable is lower than the 5% error level, it can be confirmed with 95% confidence that there is a positive and significant effect of the degree of openness of the economy on the economic growth of selected countries. The estimated coefficient of foreign direct investment on economic growth is 0.263, which shows that there is a positive and direct relationship between the variable of foreign direct investment and economic growth, that is, with the increase of foreign direct investment, economic growth also increases. Because the significance level of t-statistic independent of the research variable is lower than the error level of 5%, the positive and significant effect of foreign direct investment on the economic growth of the selected countries can be confirmed with 95% confidence. The estimated coefficient of government expenditure variable on economic growth is -0.218, which shows that there is a negative and inverse relationship between government expenditure variable and economic growth, and economic growth decreases with increasing government spending. Because the significance level of t-statistic of the independent variable of the study is higher than the error level of 5%, the existence of a negative and significant effect of government spending on the economic growth of selected countries can be denied with 95% confidence. Therefore, government spending does not affect the economic growth of selected countries.

The test results of the research hypothesis showed that financial development affects the economic growth of selected countries. That is, with increasing financial development, economic growth in selected countries increases. In this regard, Fathiyeh Ismail et al. (2016) evaluated the impact of financial development on economic growth in selected Asian countries. In their study, which was conducted using
data panel method, inflation variables, economic growth, and financial development indicators entered the research model to test the relationship between economic growth and financial development. The results of their research show that there is a positive and long-term relationship between financial development and economic growth in selected countries. In their study, Noor et al. (2016) examined the relationship between financial market development and economic growth. Their research suggests that the development of financial markets has a positive effect on economic growth. In their study, Pardan et al. (2016) examined the relationship between innovation, financial market development and economic growth. The results of their research showed that the ability to innovate and develop the financial sector has a positive effect on long-term economic growth. Chong and Lem (2011) examined the relationship between financial development and economic growth through the generalized torque method of 70 developed and developing countries during the period (2002-2008). The results show that foreign direct investment has a significant negative impact on economic growth. In recent years, the division of countries into three groups has yielded different results according to their income: foreign direct investment has had a positive effect on the economic growth of high-income countries. Foreign direct investment has had a significant negative impact on the economic growth of middle-income countries. Although foreign direct investment has had a negative impact on some regressions, it has had a positive effect on all regressions in terms of financial development.

The results of the research hypothesis test showed that the accumulation of human capital has an impact on the economic growth of selected countries. In this regard, Kasak and Tobin (2015) in their research examined the impact of economic factors on human development. Research has shown that in countries with high levels of human capital, increasing the openness of the economy leads to increased human development. But in countries with low levels of human capital, increasing the openness of the economy leads to a reduction in human development. In a study, Kim et al. (2015) examined the impact of financial development on human development. Their results show that banking development increases human development, but its impact on non-governmental business units is stronger. Further analysis shows that stock market development is an alternative to institutional factors such as accounting quality, legal requirements, stock market integration, and stock market structure reform. Abdul Salam et al. (2015) conducted a study entitled Financial Development, Human Capital Accumulation and Economic Growth: Experimental Evidence from the Economic Community of West African States. In this study, they used the panel aggregation method. The results of the study show that the credits of the private bank and the credits of the domestic bank have a significant impact on the economic growth of the West African countries, both of which directly affect the accumulation of capital. Also, the results show that both of these credits to individuals and companies, through appropriate financial policies, lead to increased and encouraged economic growth.

The results of the research hypothesis test showed that inflation affects the economic growth of selected countries. That is, as inflation rises, economic growth in selected countries will decline. In this regard, Ransey et al. (2006) in an article covering the information of 60 countries in the period (2002-2002) showed that the classical model of economic growth for variables such as inflation, economic openness, population growth and government size It is meaningful and agrees with oversight, but the effects of the liberalization of financial markets and capital flows, although positive, have a positive effect on economic growth, largely due to crises and indirect effects. Fethiye Ismail et al. (2016) evaluated the impact of financial development on economic growth in selected Asian countries. In their study, which was conducted using data panel method, inflation variables, economic growth, and financial development indicators entered the research model to test the relationship between economic growth and financial development. The results of their research show that there is a positive and long-term relationship between financial development and economic growth in selected countries. Soltani (2013) conducted a study to investigate the long-term relationship between the variables of economic development and financial growth and inflation in Iran. In the final model, the coefficients of production share of investment, financial depth and inflation are 1163140, 24547 and 3661, respectively, which are statistically significant at 5% according to the relevant t-statistics, and therefore these variables have a positive effect on economic growth. It has been influential that the variable of financial depth has a positive effect on economic growth, which can be due to the fact that the government has given investors
the opportunity to expand their activities at a lower cost by lowering interest rates. Increasing investment has led to increased economic growth. With increasing share of production from investment, economic growth has increased. This is due to the fact that with increasing production, gross domestic product has increased, which means that economic growth has increased.

The results of the research hypothesis test showed that the degree of openness of the economy affects the economic growth of the selected countries. That is, with increasing imports and exports in the country, economic growth in selected countries will increase. In this regard, Kasak and Tobin (2015) in their research examined the impact of economic factors on human development. Research has shown that in countries with high levels of human capital, increasing the openness of the economy leads to increased human development. But in countries with low levels of human capital, increasing the openness of the economy leads to a reduction in human development. Ransey et al. (2006) in an article covering the data of 60 countries in the period (1980-2002) showed that the classical model of economic growth for variables such as inflation, degree of economic openness, population growth and government size is significant and agrees with monitoring. However, the effects of the liberalization of financial markets and capital flows, although they have a positive effect on economic growth, are largely due to crises and the indirect effects of them.

The results of the research hypothesis test showed that foreign direct investment affects the economic growth of selected countries. That is, as foreign direct investment increases, economic growth in selected countries will increase. In this regard, Azman et al. (2010) in a study examined the role of the financial market in the relationship between foreign direct investment and economic growth. They used the data from 92 countries in the period 1975-2005 and the threshold estimation method to conclude that when the development of the financial market increases to a certain extent, the impact of foreign direct investment on economic growth will be positive. Chung and Lem (2011) examined the relationship between financial development and economic growth through the generalized torque method for 70 developed and developing countries during the period (2002-2008). The results show that foreign direct investment has a significant negative impact on economic growth. In the later stages, by dividing the countries into three groups, different results were obtained according to their income: foreign direct investment had a positive effect on the economic growth of high-income countries. Foreign direct investment has had a significant negative impact on the economic growth of middle-income countries. Although foreign direct investment has had a negative impact on some regressions, it has had a positive effect on all regressions in terms of financial development.

The results of the research hypothesis test showed that government spending does not affect the economic growth of selected countries. In this regard, Chong and Lem (2011) examined the relationship between financial development and economic growth through the method of generalized torque for 70 developed and developing countries during the period (2002-2008). The results show that foreign direct investment has a significant negative impact on economic growth. In the later stages, by dividing the countries into three groups, different results were obtained according to their income: foreign direct investment had a positive effect on the economic growth of high-income countries. Foreign direct investment has had a significant negative impact on the economic growth of middle-income countries. Although foreign direct investment has had a negative impact on some regressions, it has had a positive effect on all regressions in terms of financial development. In a study, Abu Nouri and Teymouri (2013) examined the effect of financial development on the economic growth of selected countries that are members of the Organization for Economic Co-operation and Development and countries with higher than average incomes and compared them. For this study, five financial development indicators were used, which are: the ratio of private funds of banks’ monetary deposits to GDP, the ratio of cash debts to GDP, the ratio of assets of banks’ monetary deposits to GDP, the ratio of private credits to monetary deposits Banks and other financial institutions to GDP and the ratio of banks’ deposits to GDP. Estimation of the patterns was performed using the economic data measurement method for panel data for 26 member countries of the Organization for Economic Co-operation and Development and 23 countries with above-average incomes during the period 2009-2010. The results show that financial development has a negative and significant effect on the economic growth of selected countries, and
since the member countries of the Organization for Economic Co-operation and Development have a higher level of development, the intensity of this effect is smaller for these countries. Other variables include government size, inflation and per capita real GDP, investment, and the degree to which the economy is open to theoretical expectations.

Finally, according to the findings, the following suggestions are presented:

- According to the test result of the first hypothesis, "financial development affects the economic growth of selected countries." Therefore, it is suggested that countries increase financial development, because increasing financial development can lead to increased economic growth, and increasing economic growth can increase the demand for financial services and the need for new financial instruments, thereby increasing financial turnover in countries. Be and many problems will be solved.

- According to the test result of the second hypothesis, "human capital development affects the economic growth of selected countries." Therefore, it is suggested that countries pay attention to their manpower, because the biggest comparative advantage in the future competitive world will be the manpower of countries and organizations. Today, the added value of minds is more valuable than the added value of other resources. For this reason, it is said that many of our current problems are not in the realm of equipment and facilities, but in the realm of human beings. If we accept that human capital is the greatest and most valuable asset of any organization or country, we must accept that everything that is more valuable and more valuable needs to be better maintained, cared for, and better managed.

- According to the test result of the third hypothesis, "inflation affects the economic growth of selected countries." Therefore, it is suggested that countries refrain from creating any plan by preventing excessive growth of liquidity, reducing unnecessary government spending in order to reduce budget deficit by implementing financial discipline in the government, increasing employee salaries gradually by an average below the inflation rate. The new construction by governments and the further injection of foreign exchange into the market by the central bank will reduce inflation to lead to economic growth.

- According to the test result of the fourth hypothesis, "the degree of openness of the economy affects the economic growth of the selected countries." Therefore, it is suggested that countries consider increasing the credit of the banking and private sectors, as well as exports and imports in order to increase the development of the financial market. It can be said that the implementation of policies such as: gradual opening of economic doors of these countries to free trade and reduction of trade barriers, re-examination of trade liberalization policies, psychoanalysis and facilitation of foreign trade and identification of vulnerable and competitive industries can be selected. Further economic growth will help.

- According to the results of the fifth hypothesis test, "foreign direct investment affects the economic growth of selected countries." Therefore, it is suggested that countries pay attention to the issue of foreign investment, because it will cause significant changes in the macroeconomic indicators of the destination economy. Economic growth brings an increase in government tax revenue, technology transfer and lower unemployment for countries.

- According to the test result of the sixth hypothesis, "government spending does not affect the economic growth of selected countries." Therefore, it is suggested that countries reduce government spending by reducing the costs of government agencies, reducing unnecessary costs in the institutions, because in this way they can help increase economic growth.

References


