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Modeling and Measuring the Effectiveness of Positive Shocks in the Financial Sector of Iran's Economy

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EXTENDED ABSTRACT

INTRODUCTION

One of the most important questions for economists is to explain the relationship between the real and financial sectors in economics because understanding this link helps them to plan for economic growth. financial sector is one of the most critical factors in developing products and an essential link in creating different economic sectors, so it is necessary to understand the impact of changing this sector on other sectors. In this regard, the purpose of this article is to evaluate the position of financial intermediations in the country and explain its impact and effects on other economic sectors.

METHODOLOGY

This article, using the Partial Extraction Method of Dietzenbacher & Lahr (2013), which is a modified version of Extraction Methods in evaluating economic sectors of the Input-Output table, studies the effects and consequences of 10% positive shock in the financial sub-sectors of Iran including bank, sub-sector insurance, and sub-sector financial intermediations. The table used in this research is the input-output table of 2017, which has been calculated through the semi-statistical method of RAS based on the input-output table of 2011. The input-output analytical table is an industry-industry symmetric table or a commodity-commodity one. The industry-industry table demonstrates what each economic sector has given to other sectors (supply of products) and what it has taken or received from them (demand for inputs).

FINDINGS

Due to the positive shock in the field of banking services, 5 sectors will face the most added value; dwelling constructions, other constructions, compulsory social security activities and farming of animals. As a result of a positive shock to the financial intermediation services, 5 sectors will face the most added value; manufacturing iron and steel, manufacturing other basic metals and casting metal, the manufacture, repair and installation of computer, electronic and optical products, manufacturing motor vehicles, trailers, and semi-trailers. Due to the positive shock to the insurance services, the sectors that will create the most added value are: other constructions, coal and lignite mining, manufacturing, repair and installation of computer, electronic and optical products, stone, sand and clay mining and transportation.

CONCLUSION

The results of this study show that in case of a 10% increase in the supply of banking services (with codes 6411 and 6419 ISIC) in Iran economy, the "dwelling constructions" sector will face a 1.12% increase in value-added, which is equal to 2851589 million Rials. Its intermediate output has witnessed a growth of 1982931 million Rials, equivalent to 0.52%. After this sector, the activities of "other constructions," "compulsory social security activities," and "farming of animals" face 1.01, 0.85, and 0.79 percent increase in value-added. In case of a 10% increase in the supply of financial intermediations services (with codes 642, 643, 649, 661, 662, and 663 ISIC), the "manufacture of basic iron and steel" with a 0.6% increase in value-added equal to 751357 million Rials will face an intermediate output of 161748 million Rials, equivalent to 0.06% increase. After this section, there are the activities of "Manufacture of other basic metal and casting metals," "manufacture, repair, and installation of computer, electronic and optical products," and "manufacture of motor vehicles, trailers, and semi-trailers" with 0.52 and 0.48% and 0.47% increase in value-added. If the supply of insurance services (with codes 651, 652, and 653 ISIC) in the Iran economy increases by 10%, the "other constructions" sector will face a 0.53% increase in value-added, which is equal to 1940166 million Rials as its intermediate output is 1224203 million. Rials have witnessed a rise of 0.26%. After this sector, the activities of "coal and lignite mining," "manufacturing, repair and installation of computer, electronic and optical products," and "stone, sand and clay mining" activities will face 0.46%, 0.39%, and 0.30% increase in value-added. Finally,

all types of financial services were aggregated, and a 10% increase in the supply of the financial sector in Iran economy was studied. The results showed that "other constructions" sector faces a 1.69% increase in value-added, equivalent to 614627 million Rials, as its intermediate output will increase by 3878263 million Rials (0.82%). After that, the sectors "Construction, repair, and installation of computer, electronic and optical products," "dwelling constructions," and "farming of animals" face 1.57, 1.50, and 1.40 percent will increase in added value.

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