Journal of Economic Cooperation and Development, 38, 2 (2017), 109-134

The Optimal Choice of Exchange Rate Regime for Jordanian Dinar

Usama R. Alqalawi¹, Hail A. Jemel² and Ahmad A. Alwaked³

Jordan adopted various foreign exchange rate systems ranging from floating to different pegging regimes. The aim of this study is to evaluate the effect of using different pegging exchange rate regimes on the stability of the JD exchange rate.

This study found that pegging to the IMF Special Drawing Rights was the best choice. This is so because this alternative would lead to more stability of the JD and local prices compared to other alternatives.

Keywords: Exchange rate; Pegged exchange rates; Fixed exchange-rate

JEL classification: F31; O24

1. Introduction

Shortly after Bretton-Woods System of adjustable fixed exchange rate fall down, on 15 August 1971, many exchange regimes spread in the developing countries. Some tended to peg the domestic currency to the SDR, or to a basket of currencies of major trading partners. Other countries adopted a form of partial or administrated floating exchange rate system. The decision of selecting a certain exchange rate system is affected by openness level, diversification, and availability of international reserves. The concern of a country was to stabilize its currency exchange rate against currencies of its major trading partners for the purpose of creating stability in domestic prices.

¹Hashemite University, Department of Economics, Zarqa, Jordan Email: urmal-qalawi@hu.edu.jo
 ²Hashemite University, Department of Economics, Zarqa, Jordan Email: hail_jemel@yahoo.com
 ³Yarmouk University, Department of Economics, Irbid, Jordan ahmad.waked@yu.edu.jo

Choosing the appropriate exchange rate system has become a vital issue for Jordanian economy, considering the increasing number of countries integrated into the international money market at the present time. Initially, choosing the exchange rate regime was based on the criteria of the Optimum Currency Area (OCA). And whether to adopt a fixed or a flexible exchange rate depends on factor mobility (Mundell, 1961), economic openness (McKinnon, 1963), economic diversification (Kenen, 1969), and cost/benefit (Woods, 1973).

More recently, Stockman (1999), Yagci (2001), and Hammond and Rummel (2005) indicate that choosing an exchange rate system depends on various considerations, including: size of the economy, openness, production diversification, deviation of inflation from the level of inflation of main trading partners, labor and capital mobility, shocks, and flexibility of the financial policy.

This study attempts to find out the best exchange rate pegging regime for the JD in order to create stability against currencies of its major trading partners, ensure stability in the domestic prices level, protect against the rise of the cost of imports, and minimize the Jordanian foreign debt.

This paper is organized as follows: in Section 2, gives a brief overview of different considerations in selecting the exchange rate system. In Section 3, we present the different pegging regimes and their advantages and disadvantages. In Section 4, we discuss the optimal exchange rate system for the JD. Section 5 describes the data and the used methodology. Section 6 concludes the paper.

2. Considerations in selecting the exchange rate system

Typically, choosing the exchange rate system is influenced by macroeconomic conditions of each country and nature of the shocks to which it is exposed. Domestic shocks require an exchange rate system different from the external one.

Countries are advised to adopt a fixed exchange rate system to ensure greater stability in the domestic price levels if its economy is characterized by being small, open with less diversified production and exports structure and more dependent on foreign trade. The fixed

exchange rate is considered a more attractive option for countries with a small variation in the inflation rate and development scale, compared to their trading partners. According to Mundell (1961) this alternative is appropriate when there is a high degree of labor mobility. On the other hand, a large economy that is less open, and more diversified in production and exports structure with capital mobility is advised to adopt flexible exchange rates (IMF, World Economic Outlook, 1997). The IMF's annual report on (2000) indicates that pegging to a single currency system is not the best choice for all the countries under all conditions, and flexible exchange rates may be more suitable under globalization. Taking this in mind, many emerging market countries adopted flexible exchange rate systems for better adjustment to economic conditions, inflation, and objects of the monetary policy (IMF, Annual Report, 2000). Few economies with a large volume of trade adopt fixed exchange rate (Rose, 2011). In addition, pegging exchange rates offered slight advantages to emerging markets in terms of either inflation or growth performance, since such systems are associated with a larger probability of currency and financial disorders (Ghosh and Ostry, 2009).

The credibility of the national currency and national economy in general, may affect choosing an exchange rate regime. A currency pegging mechanism has been used to decelerate inflation rates in a number of countries that experienced high inflation rates during the period 1970-1980 (Bordo, 2003).

Developing countries tend to adopt managed float more than independent float. Developing countries are not interested in having their currencies freely volatile like currencies of the industrial countries. Financial markets in the developing countries are underdeveloped, their exchange markets are usually weak and their currencies are unfavorably positioned compared with the industrial countries.

Countries with greater financial openness may adopt floating regimes. In addition, highly dollarized countries are more likely to adopt fixed regimes due to an undesirable impact of sharp devaluation or unstable exchange rates (Calderón and Hebbel, 2008).

3. Pegging strategies:

A country that decides to peg its currency wonders which pegging strategy it should follow; i.e. pegging to a single currency, the SDR or a basket of currencies, and what advantages, disadvantages, and cost associated with each strategy. The following discussion addresses these queries.

1- Pegging to a single currency refers to pegging national currency with a major single currency like US Dollar or Euro. It is characterized as being simple and easy to apply. It only requires the central bank to announce anchoring its currency with a major currency that is usually one of its trading partners, The objective is to reduce fluctuations in the exchange rate of the two currencies, and to remove the risks associated with foreign exchange rate faced by traders and investors, while in the same time increase credibility with the national currency (Crockett and Nsouli, 1977).

The disadvantage related to this strategy is that the national monetary authority needs a great amount of reserves in the Central Bank to keep exchange rate at a fixed level. Such reserves are used to intervene in the foreign exchange market to stabilize the exchange rate (Cruz-Rodriguez, 2013). Studies report that pegging would restrict a free use of the economic policy since applying pegging system has been accompanied with financial, monetary, and debt crises (Ghosh and Ostry, 2009).

2- Pegging to SDR: The SDR value is defined based on a basket of currencies currently includes the US Dollar, Euro, Pound Sterling and the Japanese Yen. Some developing countries adopted this pegging regime since mid-70's of the last century. Such strategy creates greater stability to their national currencies due to the stability of the SDR components. The increase in the value of one component currency is counter balanced by a decrease in the value of another, with a final effect of balanced or stable total value of SDR (Coats, 1982). Some authors argue that pegging to the SDR was characterized by less volatility in real exchange rates in comparison with pegging to a single currency as the US Dollar or the Sterling Pound (Lipschitz, 1979).

This strategy is criticized by the fact that SDR components and value are uncontrollable by the pegging country but by the IMF that determines its value on a daily basis. In addition, the country may not use SDR as a reserve for intervention and settlement of international transactions unless it is converted into an international currency. Also the US Dollar still weighs significantly. It accounts for approximately 40% of the SDR (Ali, 1985), implying greater volatility in the dollar value and a currency pegged to it.

3. Pegging to a basket: Some countries attach their currencies with a basket of the currencies of their respective main trading partners. The basket components are freely chosen by a country and controlled by its central bank so as to reach real exchange rates that are described as the appropriate rates against currencies of the main trading partners (Crockett, 1977). A number of developing countries chose a regime of pegging to a weighted basket of currencies based on one of the following bases (IMF, Annual Report, 1983; Crockett and Nsouli, 1977):

a. The import-weight index is the exchange rates of a country's currency calculated using the relative weighted mean of other currencies by respective share of each trading partner in its imports.

b. The export-weight index is the exchange rates of the currency against a weighted mean of other currencies by respective share of each foreign partner in its total exports.

c. the bilateral-weight index is exchange rates of national currency relative to foreign currencies, against a baseline period weighted by the respective share of each trading partner in the aggregate imports and exports of a developing country.

A significant problem in the policy of linking the JD with the US Dollar is that a variation in US Dollar rate will totally affect the value of the JD. A reduction in JD value resulting from low US Dollar rate will result in higher inflation rates, and a significantly great reduction may substantially affect the living cost with major social consequences of worsening the poverty problem. The direct implication of linking the JD with the US Dollar is that the JD value will be fixed against the US Dollar, not the other foreign currencies.

4. Data and Methodology

This section is primarily about analyzing the variation in real exchange rate during 1995-2014. The used data were collected from the IMF and Jordan Central Bank. The purpose of this section is to quantify the amount of variation in the JD real exchange rate calculated based on five different pegging regimes. Standard deviation and coefficient of variation methods were used to find out the best pegging exchange rate regime.

The JD exchange rate was calculated based on five different pegging regimes. First, in the case of pegging the JD to the US Dollar we calculate the JD real exchange rate based on the number of US Dollars the JD can buy using the following formula:

$$RERD_t = ER_t * \frac{P_t}{P_t^{US}}$$

were, $RERD_t$ represents the JD real exchange rate at year t, based on the number of US Dollars the JD can buy when pegging to US Dollar, ER_t represents the nominal exchange rate at time t, P_t and P_t^{US} correspond to the price level in Jordan and US consecutively at time t, all calculated using the GDP deflator. Second, in the case of pegging the JD to IMF (SDR) the exchange rates were calculated by IMF. Alternatively, this strategy suggests pegging the JD with the SDR that currently includes four major currencies: the US Dollar, Euro, the Yen and the Sterling Pound based on the assumption that the JD equals one unit of the SDR

Third, in the case of pegging the JD to a certain basket that contains currencies of key trading partners of Jordan, the real exchange rate of JD based on the number of US Dollars the JD can buy was calculated by using the following formula:

$$RERT_{t} = \sum_{i}^{n} \left(ER_{t} * \frac{P_{ti}}{P_{t}^{US}} * \frac{T_{ti}}{T_{t}} \right)$$
$$T_{t} = \sum_{i}^{n} T_{ti}$$

were, $RERT_t$ symbolizes the JD real exchange rate based on the number of US Dollars the JD can buy when pegging to key trading partners of Jordan, the subscript i represents one of Jordan's key trade partners, n corresponds to the number of Jordan's key trade partners included in the study, in our case n= 15, t correspond to a certain year, ER_t represents the nominal exchange rate of i country, and it defined as the number of US Dollars one unit of i currency can buy, P_{ti} represents the price level in i, country at time t. T_{ti} stands for the amount of trade between Jordan and country i and T_t is the total trade between Jordan and all n countries.

Fourth, in the case of pegging the JD to a certain basket of currencies for key Jordanian exporting partners, the JD real exchange rates based on the number of US Dollars the JD can buy was calculated using the following formula:

$$RERX_{t} = \sum_{i}^{n} \left(ER_{t} * \frac{P_{ti}}{P_{t}^{US}} * \frac{X_{ti}}{X_{t}} \right)$$
$$X_{t} = \sum_{i}^{n} X_{ti}$$

were, $RERX_t$ symbolizes the JD real exchange rate based on the number of US Dollars the JD can buy when pegging to key exporting partners of Jordan, the subscript i represent one of Jordan's key exporting partners, n corresponds to number of Jordan's key export partners included in the study, in our case n= 15, ER and P_{ti} are the same as previously defined, X_{ti} stands for the amount of export from Jordan to country i, and X_t represents the total export of Jordan to all n countries.

Fifth, in the case of pegging the JD to a certain basket of currencies for Jordan's key importing partners. The JD real exchange rate based on the number of US Dollars the JD can buy was calculated using the following formula:

$$RERM_{t} = \sum_{i}^{n} \left(ER_{t} * \frac{P_{ti}}{P_{t}^{US}} * \frac{M_{ti}}{M_{t}} \right)$$
$$M_{t} = \sum_{i}^{n} M_{ti}$$

were, $RERM_t$ symbolizes the JD real exchange rate based on the number of US Dollars the JD can buy when pegging to key importing partners of Jordan, the subscript i represent one of Jordan's key importing partners, n corresponds to the number of Jordan's key importing partners included in the study, in our case n= 15, ER_t , P_{ti} is the same as previously defined, M_{ti} stands for the amount of import from country i to Jordan, and M_t represents the total import of Jordan from all n countries to Jordan.

5. Results and Recommendations

Table (1) presents the used data that include Jordanian and US price level based on GDP deflator, the nominal exchange rate of Jordan per US Dollar, the real exchange rate of Jordan per US Dollar and the real exchange of the US Dollar per JD. These data were used to calculate the JD real exchange that is pegged to the US Dollar. The variation of the last column shows the expected fluctuation in the cost of trade and debt.

The calculation in table (1) shows an increase in the JD real exchange rate from 1.1 \$ per JD in 1995 to 1.7 \$ per JD in 2014. This implies a depreciation of bilateral real exchange rate in favor of the US. Therefore, over the period of study, Jordanians were able to buy fewer goods and services with their money from the US. The reason for this is the fact that the price level in Jordan grew faster than the price level in the US while the nominal exchange rate did not change through the period of study.

Year	Price Level		Exchange Rate		
	JOR	US	Nominal JD/\$	Real JD/\$	Real \$/JD
1995	58.7973	75.324	0.7004	0.8972	1.1145
1996	60.0103	76.699	0.709	0.9062	1.1035
1997	60.7498	78.012	0.709	0.9105	1.0983
1998	64.4068	78.859	0.709	0.8681	1.152
1999	64.1489	80.066	0.709	0.8849	1.13
2000	63.8844	81.887	0.709	0.9088	1.1004
2001	64.3826	83.753	0.709	0.9223	1.0843
2002	64.9757	85.039	0.709	0.9279	1.0777
2003	66.3689	86.735	0.709	0.9266	1.0793
2004	68.4167	89.12	0.709	0.9235	1.0828
2005	69.8019	91.987	0.709	0.9343	1.0703
2006	77.237	94.814	0.709	0.8703	1.149
2007	81.138	97.337	0.709	0.8505	1.1757
2008	97.2585	99.246	0.7097	0.7242	1.3809
2009	100	100	0.71	0.71	1.4085
2010	108.4122	101.222	0.71	0.6629	1.5085
2011	115.3651	103.311	0.71	0.6358	1.5728
2012	120.5573	105.166	0.71	0.6194	1.6146
2013	127.3076	106.733	0.71	0.5953	1.68
2014	131.6925	108.289	0.71	0.5838	1.7128

Table 1: the Exchange rate and the price level of Jordan

* The data in column 2, 3 and 4 are collected from World Development Indicators IMF.

The weights of Jordan's key trade, export and import partners were calculated yearly and are given in appendix table (I), table (II) and table (III) consecutively. A set of fifteen countries was selected for each group. All These countries were selected based on the total period of accumulated trade, export and import successively. Twenty one different countries were in these three groups. All three groups include the same nine countries: Saudi Arabia, USA, China, Iraq, India, United Arab Emirates, Egypt, Turkey, and Japan. Six countries are included in the groups of trade and export key partners. These countries are Germany, Italy, South Korea, France, United Kingdom, and Russia. In addition, six countries are Indonesia, Lebanon, Israel, Kuwait, Qatar, and Malaysia.

The relative price level of Jordan key trade, export and import partners with respect to US price level were given in appendix table (IV), table (V) and table (VI) consecutively while the nominal exchange rate per US Dollar were provided in appendix table (VII), table (VIII) and table (IX) sequentially. All these appendix tables were used to calculate table (2).

Year	Pegged to	Pegged to	Pegged to	Pegged to	Pegged to
	US \$*	SDR*	currencies of	currencies of	currencies of
			key trade	key export	key import
			partners*	partners*	partners*
1995	1.1145	1.4865	0.4117	1.0918	0.5385
1996	1.1035	1.438	0.423	0.6703	0.4998
1997	1.0983	1.3493	0.4712	0.5616	0.5927
1998	1.152	1.408	0.405	0.3925	0.5263
1999	1.13	1.3725	0.6734	0.3795	0.8126
2000	1.1004	1.3029	0.8188	0.5113	0.9556
2001	1.0843	1.2567	0.7616	0.7099	0.8204
2002	1.0777	1.3595	0.7948	0.7458	0.8577
2003	1.0793	1.486	0.5174	0.4567	0.5305
2004	1.0828	1.553	0.5251	0.4863	0.5349
2005	1.0703	1.4293	0.5264	0.4903	0.5265
2006	1.149	1.5044	0.5122	0.5042	0.506
2007	1.1757	1.5802	0.5328	0.4949	0.5258
2008	1.3809	1.5403	0.4844	0.3844	0.5244
2009	1.4085	1.5677	0.4746	0.3829	0.5055
2010	1.5085	1.54	0.4659	0.4056	0.496
2011	1.5728	1.5353	0.4933	0.3986	0.5109
2012	1.6146	1.5369	0.4779	0.4356	0.4852
2013	1.68	1.54	0.4769	0.4519	0.4916
2014	1.7128	1.4488	0.4641	0.4613	0.4643

Table 2: The expected real exchange rate for Jordan (\$ per JD)

• Authors calculation

Table (2) aims to find out a time series for yearly expected real exchange rate of Jordan given five different scenarios. All these five scenarios show the amount of US Dollars the JD can buy in real term. The average of the total period of the real exchange rate was very close when calculated using trade criteria. However, this is not weird since nine out of fifteen countries were included in the same three scenarios. Another remark about the real exchange rate calculated using trade criteria is that all three methods are becoming closer to each other by time as seen in graph (1).



Graph 1:. The expected real exchange rate for Jordan (\$ per JD)

The variation in the real exchange rate was calculated using two methods: the standard deviation, and the coefficient of variation. Both methods showed that pegging the JD to the SDR will clearly minimize the variation in real exchange rate. When pegging to the SDR, the variation in real exchange rate using standard deviation was equal to 0.09. The next best was to peg to the currencies of key trade partners with standard deviation equal to 0.12. The worst choice was to peg to the US Dollar.

Table 3: The ex	pected real	l exchange rate	for Jordan	(\$	per JD))
-----------------	-------------	-----------------	------------	-----	---------	---

Year	Pegged to US \$	Pegged to SDR	Pegged to currencies of key trade partners	Pegged to currencies of key export partners	Pegged to currencies of key import partners
Mean	1.2648	1.4618	0.5355	0.5208	0.5853
Maximum	1.7128	1.5802	0.8188	1.0918	0.9556
Minimum	1.0703	1.2567	0.405	0.3795	0.4643
SD	0.2308	0.0943	0.1241	0.1719	0.1464
CV	0.1825	0.0645	0.2317	0.3301	0.2501

• Authors calculation

The mean value of each series was clearly different as seen in table (3). And this may reduce the accuracy of the previous results. The coefficient of variation (CV) solves this problem. The minimum variation using the coefficient of variation was found again when the JD is pegged to the SDR with a value equal to 0.06. This result is in line with Coats (1982) who found that pegging to the SDR creates greater stability in comparison with other pegging systems. The next best was when the JD is pegged to the US Dollar with a value equal to 0.18, and the worst was when the JD is pegged to 0.33.

Jordan's exports are less diversified and are mainly concentrating on raw materials such as phosphate and potash, so the JD exchange rate against other currencies has no or little effect on the Jordanian exports as evaluated with the US Dollar. Jordan's imports, on the other hand, are diversified and brought in from different sources; hence they are not priced equally on the international market. A little change in the major foreign currencies against the JD can have a perceivable effect on the domestic prices of imports. In fact, the greater the number of currencies in the basket, the lesser is the effect of a single currency on the overall basket value. In addition, the increase in one currency value might be counterbalanced by a decrease in the value of another currency with a final effect being a balanced basket value. If Jordan could maintain a stable exchange rate of its currency against its main trading partners, then the benefit will be a more flourishing trade and a greater inflow of capitals (Crocket and Nsouli, 1977).

The trends of real exchange rate based on different pegging strategies are calculated in table (4). The results showed that the bilateral real exchange rate based on pegging to the US Dollar had a positive significant trend equal to 3.3% during the period of study. This confirms the previous result that the JD real exchange rate is being depreciated against the US Dollar. Similarly, the trend of exchange rate based on the SDR pegging strategy had a significant positive trend equal to 1%. However, it had a different meaning since it's not a real exchange rate. It implies that the JD exchange rate would have been appreciated during the period of study if the Jordanian government was adopting the SDR pegging strategy. The appreciation of real exchange rate, on the other hand, would have been fulfilling too if the government adopted the other three basket pegging strategies. The results demonstrated that the real exchange rate based on pegging to a basket of key trade and import partners had a significant negative trend equal to -1.6 % and -1.1% successively. Furthermore, the real exchange rate based on pegging to a basket of key export partners had an insignificant negative trend equal to -4.1%.

	Pegged to US \$	Pegged to SDR	Pegged to currencies of key trade partners	Pegged to currencies of key export partners	Pegged to currencies of key import partners
Constant	0.9168	1.3612	0.5788	0.6925	0.7013
	(0.0581)***	(0.0360)***	(0.0581)***	(0.0678)***	(0.0625)***
Trend	0.0331 (0.0331)***	0.0096	-0.0412	-0.01636 (0.0057)***	-0.0111 (0.0052)**
	× /		· · · · ·	× /	· · ·
\mathbf{R}^2	0.7216	0.3604	0.0386	0.317	0.2
F	46.6562***	10.1438***	0.7236	8.3527***	4.4933**

Table 4: The trend of different pegging strategies (\$ per JD)

* 1% level of significant,

** 5% level of significant

*** 1% level of significant

6. Conclusion

This study showed that pegging to the US Dollar, the current situation, created less stability for the JD. In addition, the JD bilateral real exchange rate with the US experienced sharp depreciation with positive trend equal to 3.3% during the period of study. The JD real exchange rate was equal to 1.1\$ per JD in 1995 and reached 1.7\$ per JD in 2014. This caused a negative effect on the Jordanian economy represented by a higher cost of Jordan's imports from its trading partners, and an increased foreign debt burden.

Conversely, the basket pegging strategies, especially SDR pegging strategy, proved to be better alternatives to pegging to the US Dollar. The study demonstrated that pegging the JD to the SDR created greater

stability for the JD. Furthermore, the trend of nominal exchange rate based on the SDR pegging strategy had a significant positive trend. Similarly, the results demonstrated that the real exchange rate based on pegging to a basket of key trade, export and import partners had a negative trend. This may contribute to greater stability in the domestic prices level.

The study recommends policymakers to shift from the current exchange rate regime where the JD is pegged to the US Dollar, to the exchange rate regime of pegging the JD to the SDR. This strategy achieves greater stability to the exchange rate of the JD and the domestic prices level, while it cuts down the cost of imports and the external debt.

References

Al-Tayeh, S. and Ali, O., 1995, "Exchange Rate Policy and Management in Jordan," Seminar on Policy and Management of Exchange Rates in the Arab Countries, (Abu Dhabi: Arab Monetary Fund).

Ali, A., 1985, "Effects of the Collapse of the International Monetary System on the Arab Countries", Paper presented at the 8th Forum "Arab and the Global Economic Crisis" (Kuwait: Arab Institute of Planning, 19 December).

Bordo, M., 2003, "Exchange rate regime choice in historical perspective," NBER Working Paper No. w9654, (Cambridge, Massachusetts, National Bureau of Economic Research).

Calderón, C., and Hebbel, K., 2008, "Choosing an exchange rate regime," Working Papers of Central bank of Chile No. 494.

Central Bank of Jordan, 2002, 2003, 2004 and 2013, Annual Report.

Central Bank of Jordan, (1964-2004) Financial & Banking System in Jordan.

Coats Jr, W., 1982, "The SDR as a Means of Payment," IMF Staff Papers, Vol. 29, pp. 422–436.

Crockett, A., 1977, International Money: Issues & Analysis. Academic Press.

Crockett, A. D., and Nsouli, S. M., 1977, "Exchange rate policies for developing countries," The Journal of Development Studies, Vol. 13, No. 2, pp. 125-143.

Cruz-Rodriguez, A., 2013, "Choosing and assessing exchange rate regimes: a survey of the literature," Economic Analysis Review, Vol. 28, No.2, pp. 37-61.

Ghosh, A. R., and Ostry, J. D., 2009, "Choosing an Exchange Rate Regime-A new look at an old question: Should countries fix, float, or choose something in between?," Finance & Development, Vol. 46, No. 4, pp. 38.

Hadeed, J., 1984, "Jordanian Dinar and its Economic Indices," Jordan Arab Investment Bank.

Hamann, A. J., 2001, "Exchange-rate-based stabilization: a critical look at the stylized facts," IMF Staff Papers, Vol. 48, No.1 pp. 111-138.

Hammond, G., and Rummel, O., 2005, "exchange rate regimes and capital flows". Bank of England Quarterly Bulletin, Chief Economist Workshop

International Monetary Fund (IMF), 1983, 2000, and 2008, Annual Report, Washington, D.C.

International Monetary Fund (IMF), 1997, World Economic Outlook: A Survey by the Staff of the International Monetary Fund.

International Monetary Fund (IMF), 1997, "Exchange Rate Arrangements and Economic Performance in Developing Countries," World Economic Outlook, October (Chapter IV).

International Monetary Fund (IMF), 2001, and, 2006, International Statistics, Washington, D.C.

International Monetary Fund (IMF), 2000, and, 2003, World Economic Outlook, Washington, D.C.

Kenen, P. B., 1969, "The Theory of Optimum Currency Areas: An Eclectic View" in Mundell, R. A. and Swoboda, A. K., 1969, Monetary Problems of the International Economy, (Chicago: The University of Chicago Press).

Kock, D. M., 1938, Central banking. [Al makhazoomy, A., (1987). An Arabic translated version].

Levy-Yeyati, E., and Sturzenegger, F., 2005, "Classifying exchange rate regimes: Deeds vs. words," European economic review, Vol. 49, No. 6, pp. 1603-1635.

Lipschitz, L., 1979, "Exchange Rate Policy for a Small Developing Countries and Selection of an Appropriate Standard," IMF Staff Papers, Vol. 26, pp. 423-449.

McKinnon, R. I., 1963, "Optimum currency areas," The American Economic Review, pp. 717-725.

Mundell, R. A., 1961, "A theory of optimum currency areas," The American Economic Review, pp. 657-665.

Reinhart, C. M., and Rogoff, K. S., 2002, "The modern history of exchange rate arrangements: a reinterpretation," NBER Working Paper No. w8963, (Cambridge, Massachusetts, National Bureau of Economic Research).

Rose, A. K., 2011, "Exchange Rate Regimes in the Modern Era: Fixed, Floating, and Flaky," Journal of Economic Literature, pp. 652-672.

Rummel, O., 2010, "choosing and changing an exchange rate regime," Presentation at Bank of England.

Sfia, M. D., 2011, "The choice of exchange rate regimes in the MENA countries: a probit analysis," International Economics and Economic Policy, Vol. 8, No. 3, pp. 275-305.

Stockman, A. C., 1999, "Choosing an exchange rate system," Journal of Banking and Finance, Vol. 23, No. 10, pp. 1483-1498.

Woods, G.E., 1973, "European Monetary Union and the U.K.: Cost-Benefit Analysis," Survey Papers in Economics, pp. 50.

Yagci, F., 2001, "Choice of exchange rate regimes for developing countries," World Bank-African Region Working Paper Series, pp. 16.

Appendix

$\hat{0}$
1(
\mathbf{I}^*
È
Ð
11
er
Ħ
Dai
5
ade
tr
Ň
ke
n
g
ō
Ę.
to
Å.
.e.
A
le
rac
6
Ъ
L
Ë
le
at
Ξ

	-			-		-	-	-	-	-	-	-	_		-	-	-	-		
RS	17.9	8.9	15.9	19	7.6	8.5	8.4	7.9	2	1.7	0.5	0.5	0.3	0.4	0.5	0.4	0.5	0.3	0.3	0.2
UK	4.8	5.1	4.9	5.3	5.3	5.2	4.2	3.8	3.8	2.8	3.1	2.4	2.4	2.2	2.5	1.9	1.8	1.5	1.5	1.9
FR	4.6	5.7	3.6	3.8	4.1	4.2	4	4.1	3.5	2.9	2.5	2.4	2.7	2.6	2.6	2.3	2.1	2	2	2.3
dſ	3.9	5.1	5.5	6.1	7.1	4.5	4	3.3	3.9	3.6	3.2	3.5	3.9	4.1	4.9	3.6	2.3	2.2	2.7	2.8
KP	3.4	4.1	3	3.6	4.9	4	3.1	2.7	2.8	3.3	3.8	3.3	3.6	3.8	4.1	4.4	3.6	3.1	2.9	3.8
TR	4.1	4.7	3.1	4.5	2.6	2.4	2.9	2.7	2.8	2.6	2.8	2.8	3.3	3	3.3	4.1	3.6	4.8	4.4	4.9
EG	1.5	3	1.4	1.6	1.8	1.6	1.5	1.8	2.6	4.2	4.1	4.7	5.3	5.4	6.8	5.4	4.8	4.7	4.2	3.2
AE	2.1	2.7	2.5	2.9	3.5	2.7	3	3.1	4.4	3.2	3.4	4	3.6	3.3	3.9	4.3	5.2	4.3	5.1	6.6
TI	5.9	7.3	6.3	5.3	4.9	4.1	3.6	3.6	4.2	4.1	3.7	3.9	3.8	3.7	4	3.9	5.8	5.1	5.5	3.6
DE	8.3	9.4	10.6	<i>L</i> .6	10.5	12.5	10.1	9.2	8.6	7.1	8.5	8	8.3	6.4	6.4	6.8	4.8	4.2	4.3	4.4
NI	6.1	5	5.2	9	6	7.2	5.9	5.9	5.3	5	4.9	5	6.2	11.2	L	L.T	<i>2.9</i>	7.4	8.2	9.1
Ы	19	16.8	17.3	12.3	15.1	19.3	23.6	23	12.8	7.3	5.6	4.1	4.4	5.5	7.3	7.5	7.3	6.9	8.2	5.7
CN	2.7	2.7	2.9	3	4.4	5.2	9	7.3	9.1	9.2	10	10.8	11.2	11.7	11.5	11.7	11.4	11.3	12.2	12.4
SU	9.6	11.4	9.6	9.5	10.8	12.1	13.4	15.9	19.5	19.9	16.9	15.9	15.1	11.3	13.3	11.8	12.4	12.9	13.1	12.7
ΥS	6.1	8.2	8.3	7.4	8.3	6.5	6.2	5.7	14.9	22.9	27	28.8	25.9	25.4	21.7	24.2	26.7	29.2	25.2	26.3
Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

* Authors calculation based on data from Central Bank of Jordan

, ,	Pevelonment	To voio purcha
	Sho	nin
	()ODDeration	Topperation
ć	Ċ	5
	6 11 11 0	miimo

	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ſ	2.3	2.2	2	1.8	1.7	1.4	0.9	0.7	0.8	0.7	0.9	1.3	1.9	3.2	3.7	1.3	0.9	0.8	0.8	0.6
TR	3.5	3.3	2.6	0.8	1.6	1.5	0.9	1.1	0.7	0.6	0.8	0.5	0.6	0.6	0.7	1.3	1.7	2.5	1.9	2.9
МУ	2.6	3.5	2.4	2.7	3.3	2.2	1.7	1	1.1	0.9	0.9	1.4	1.5	1.8	0.7	1.6	2.2	1.3	1.8	1
QA	1.8	3.2	3.4	3.4	2.5	2.2	1.8	1.6	1.4	0.9	1.2	1.5	2	1.7	1.6	2.1	1.7	2.2	2.5	2.6
EG	1.6	2.5	2.3	2.5	2.5	2.5	1.5	0.9	1.4	1.2	1.5	1.4	1.9	2.1	2.2	2.7	2.2	2.3	2.2	2
КW	0.2	3.6	5.4	4.7	3.2	2.9	2.5	2.1	2.1	2.1	2.5	2.8	2.2	1.9	1.8	1.9	2.7	2	2.6	3.1
CN	2.4	1.7	2.1	2.1	4	4.9	2.9	2.7	2	1.4	1.4	1	2.1	2.3	1	2.4	3.8	3.6	2	3.3
IL	0	0.8	2.8	4.3	9	8.2	7.2	7.3	5.5	4.2	3.8	3.7	3.5	2.8	2.6	2	1.4	1.5	1.6	1.5
B	4.8	5.7	2.9	3.2	2.9	3	2.1	1.2	1.5	1.4	0.5	0.7	1.1	2.7	3.5	3.3	4.1	5.3	4.3	2.2
LB	4.3	4.4	4.5	5.3	3.6	3.6	2.7	2.9	2.6	2.3	2.2	2	2.8	2.6	4.4	4.3	5.7	4.6	2.6	2.4
AE	7.7	10.8	8.7	10.3	9.8	7.1	5.8	4.7	5.3	4.4	4.8	7.4	5.1	4.5	5.1	5.6	4.4	4.7	5.1	5.1
SA	12.4	23.5	22.2	18.4	15.9	13.6	9.5	8.8	8.8	7.9	8.6	11.6	10.7	9.7	13.2	14	12.1	14.3	17.4	17.8
Z	20.2	14.8	15.5	20.8	28.8	25.5	14.4	13.4	11.3	10.2	12.3	12	13.6	26.4	16.9	17.1	17.6	13.9	9.3	11.5
IQ	33.7	17.4	22.4	18.8	12.8	14.8	29.7	26.1	17.9	20.6	19	14	15.5	16.5	21.3	20.1	19.4	19.6	23.5	20.8
SU	2.6	2.5	8.0	1	1.5	9'9	16.3	25.5	37.5	41.2	39.6	38.8	35.8	21.2	21.4	20.4	20	21.5	22.6	23.3
Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table II: The export weight of Jordan key export partner = (Xti/Xt^*100)

* Authors calculation based on data from Central Bank of Jordan

127

Mti/Mt*100)
e
partner
Ц
impo
N
ke
Jordan
JC
weight a
import
e
μŢ
Ξ
e
q
Ta

RS	1.8	1.8	1.8	3.2	2.4	2.3	1.9	0.9	1.6	0.9	1.8	1.2	4.1	3.2	3.3	2.2	5.1	4.1	2.2	4.1
UK	7.4	6.6	7.2	7.5	6.9	6.5	5.6	5.6	5.2	3.8	3.9	3	2.9	2.8	3.1	2.3	2.1	1.7	1.8	2.2
FR	7.1	7.4	5.2	5.7	5.6	5.4	5.9	6.2	4.8	4	3.3	3.3	3.4	3.5	3.3	3	2.6	2.4	2.5	2.8
AE	0.7	0.7	0.9	1.2	1.4	1.5	1.9	2.3	3.8	2.6	2.8	2.5	2.8	2.6	3.1	3.5	5	3.8	4.8	6.7
NI	2.9	2.6	2.8	2.7	2.3	2	2.3	2.5	2.2	2.6	1.9	2.1	3.1	4.2	2.8	3.4	3.6	4.6	7.3	7.6
δI	18.7	17.8	18.8	12.8	16.3	21.3	21.9	22.5	9.8	1.2	0.4	0.1	0.1	0.6	1.5	2	2.2	2.1	2.3	0
đſ	5.4	6.3	7.6	8.6	9.2	5.6	5.6	4.7	5.2	4.8	3.9	4.2	4.3	4.1	4.9	4.2	2.6	2.5	3.2	3.4
TR	5.3	5.4	3.8	6.6	3	2.8	3.9	3.7	3.7	3.4	3.4	3.5	4	3.8	4.1	4.9	3.9	5.2	5	5.2
KP	4.6	4.7	3.5	4.9	6.3	5.1	4.5	3.9	3.8	4.6	4.9	4.2	4.4	4.8	5.2	5.7	4.3	3.7	3.6	4.7
EG	1.9	3.3	1.3	1.7	1.6	1.4	1.7	2.3	3.1	5.4	4.8	5.7	6.1	6.4	8.1	6.1	5.3	5.1	4.6	3.4
IT	8.2	8.9	8.8	7.3	6	5.2	5.1	5.3	5.7	5.6	4.6	4.9	4.6	4.5	4.8	4.7	6.8	6	6.8	4.3
DE	12.9	12	15	14.4	14.1	16.5	14.3	13.9	11.9	10	11.1	10.6	10.6	8.5	8.3	6	9	5.2	5.5	5.5
SU	14.2	14.7	14.2	14	14.3	14.2	12.7	11.8	10.2	9.9	7.7	6.5	6.5	6.5	9.3	7.6	8.5	8.9	6	8.1
CN	3.5	3.2	3.7	3.9	4.6	5.5	7.6	10	12	12.3	12.8	14.1	13.5	14.7	14.7	14.6	13	12.9	15	14.7
SA	5.4	4.6	5.3	5.5	5.9	4.7	5	4.3	17	28.9	32.7	34.2	29.4	29.9	23.4	26.7	29.3	31.6	26.4	27.3
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

* Authors calculation based on data from Central Bank of Jordan

Development
and
Cooperation
of Economic
Journal c

RS	0.08	0.12	0.13	0.15	0.26	0.35	0.4	0.46	0.51	0.6	69.0	LL^{0}	0.85	66'0	1	1.13	1.28	1.35	1.4	1.47
ΛK	0.95	<i>L</i> 6.0	86.0	86.0	86.0	86.0	L6.0	86.0	86.0	86.0	86.0	86.0	86.0	66'0	1	1.02	1.02	1.02	1.02	1.02
FR	1.07	1.07	1.06	1.06	1.04	1.03	1.03	1.04	1.04	1.03	1.01	1	1	1.01	1	1	0.99	0.98	0.98	0.97
dſ	1.52	1.48	1.47	1.45	1.41	1.36	1.32	1.28	1.23	1.18	1.13	1.08	1.05	1.01	1	26.0	6.03	0.9	68.0	0.89
КР	0.93	0.96	0.98	1.01	66.0	70.07	66.0	1	1.02	1.02	1	70.07	0.96	70.07	1	1.02	1.01	1.01	1	1
TR	0.02	0.04	0.07	0.13	0.2	0.29	0.43	0.58	0.7	0.77	0.79	0.84	0.87	0.96	1	1.04	1.11	1.17	1.22	1.32
EG	0.53	0.56	0.59	0.6	0.6	0.61	0.61	0.62	0.64	0.7	0.72	0.75	0.82	0.91	1	1.09	1.19	1.31	1.41	1.55
AE	0.65	0.67	0.65	0.62	0.66	0.72	0.69	0.71	0.72	0.76	0.86	0.93	1.02	1.19	1	1.1	1.24	1.25	1.27	1.2
IT	0.93	0.95	0.96	0.98	0.98	0.98	0.98	1	1.01	1.01	1	0.99	0.98	0.99	1	0.99	0.99	0.98	0.98	0.97
DE	1.18	1.17	1.15	1.15	1.14	1.1	1.09	1.09	1.08	1.07	1.04	1.01	1	0.99	1	1	0.99	0.98	0.99	0.99
NI	0.63	0.67	0.7	0.75	0.76	0.77	0.78	0.79	0.81	0.83	0.84	0.87	0.89	0.95	1	1.08	1.12	1.19	1.24	1.27
δı	0.19	0.16	0.31	0.26	0.43	0.61	0.48	0.5	0.53	0.6	0.77	0.88	66.0	1.28	1	1.16	1.38	1.41	1.37	1.37
CN	0.89	0.94	0.93	6.0	0.87	0.85	0.85	0.84	0.85	0.89	6.0	0.92	0.94	1	1	1.03	1.09	1.11	1.12	1.12
SN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SA	0.79	0.83	0.83	0.71	0.77	0.85	0.8	0.81	0.83	0.9	1.03	1.08	1.1	1.24	1	1.16	1.31	1.34	1.3	1.25
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table IV: The relative price for Jordan key trade partner (Pti/PtUS)

* Authors calculation based on data from World Development Indicators

(Pti/PtUS)
port partner
'Ex
key
Jordan
for.
price
relative
The
⋼
Table

															-	_				
JP	1.52	1.48	1.47	1.45	1.41	1.36	1.32	1.28	1.23	1.18	1.13	1.08	1.05	1.01	1	0.97	0.93	0.9	0.89	0.89
TR	0.02	0.04	0.07	0.13	0.2	0.29	0.43	0.58	0.7	0.77	0.79	0.84	0.87	0.96	1	1.04	1.11	1.17	1.22	1.32
МУ	0.76	0.78	0.79	0.85	0.84	0.89	0.86	0.87	0.88	0.91	0.96	0.97	0.99	1.07	1	1.03	1.06	1.05	1.04	1.05
QA	0.54	0.57	0.54	0.43	0.49	0.64	0.6	0.61	0.7	0.77	0.97	1.02	1.1	1.33	1	1.08	1.26	1.32	1.31	1.27
EG	0.53	0.56	0.59	0.6	0.6	0.61	0.61	0.62	0.64	0.7	0.72	0.75	0.82	0.91	1	1.09	1.19	1.31	1.41	1.55
КW	0.63	0.71	0.66	0.54	0.63	0.75	0.67	0.69	0.71	0.77	0.91	1.03	1.05	1.22	1	1.1	1.26	1.33	1.32	1.26
CN	0.89	0.94	0.93	0.9	0.87	0.85	0.85	0.84	0.85	0.89	0.9	0.92	0.94	1	1	1.03	1.09	1.11	1.12	1.12
IL	0.83	0.9	0.96	1.01	1.06	1.06	1.05	1.08	1.05	1.03	1.01	0.99	0.97	0.97	1	1	1	1.02	1.03	1.03
A	0.17	0.19	0.21	0.36	0.4	0.47	0.53	0.55	0.57	0.6	0.67	0.74	0.8	0.93	1	1.14	1.2	1.22	1.26	1.31
LB	0.84	0.89	1	1.03	1.03	0.98	0.94	0.98	0.97	0.92	0.88	0.86	0.86	0.91	1	0.99	1	1.04	1.04	1.04
AE	0.65	0.67	0.65	0.62	0.66	0.72	0.69	0.71	0.72	0.76	0.86	0.93	1.02	1.19	1	1.1	1.24	1.25	1.27	1.2
SA	0.79	0.83	0.83	0.71	0.77	0.85	0.8	0.81	0.83	0.9	1.03	1.08	1.1	1.24	1	1.16	1.31	1.34	1.3	1.25
Z	0.63	0.67	0.7	0.75	0.76	0.77	0.78	0.79	0.81	0.83	0.84	0.87	0.89	0.95	1	1.08	1.12	1.19	1.24	1.27
IQ	0.19	0.16	0.31	0.26	0.43	0.61	0.48	0.5	0.53	0.6	0.77	0.88	0.99	1.28	1	1.16	1.38	1.41	1.37	1.37
NS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

* Authors calculation based on data from World Development Indicators

Development
Ч
É
69
G
Ĕ
Ľa
õ
d
ŏ
\mathcal{O}
nomic
8
Щ
of
al
Journ

RS	12.33	8.61	7.61	6.49	3.82	2.84	2.49	2.19	1.96	1.68	1.45	1.3	1.17	1.01	1	0.89	0.78	0.74	0.71	0.68
UK	1.05	1.03	1.02	1.02	1.02	1.02	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.01	1	0.98	0.98	0.98	0.98	0.98
FR	0.93	0.94	0.95	0.95	0.96	0.97	0.97	0.96	0.97	0.98	0.99	1	1	0.99	1	1	1.01	1.02	1.03	1.03
AE	1.55	1.49	1.53	1.62	1.51	1.38	1.45	1.42	1.39	1.32	1.17	1.07	0.98	0.84	1	0.91	0.8	0.8	0.79	0.83
N	1.58	1.5	1.43	1.34	1.31	1.3	1.29	1.26	1.24	1.21	1.19	1.16	1.12	1.05	1	0.93	0.89	0.84	0.8	0.78
QI	5.26	6.12	3.25	3.91	2.32	1.65	2.1	2	1.89	1.66	1.3	1.13	1.01	0.78	1	0.86	0.72	0.71	0.73	0.73
ſ	0.66	0.67	0.68	0.69	0.71	0.73	0.76	0.78	0.81	0.85	0.89	0.92	0.96	0.99	1	1.03	1.08	1.11	1.13	1.13
TR	41.95	24.02	13.46	7.74	5.1	3.5	2.34	1.73	1.43	1.31	1.26	1.19	1.15	1.05	1	0.96	0.9	0.86	0.82	0.76
KP	1.07	1.04	1.02	0.99	1.01	1.03	1.01	1	0.98	0.98	1	1.03	1.04	1.03	1	0.98	0.99	0.99	1	-
EG	1.87	1.78	1.71	1.66	1.67	1.63	1.64	1.62	1.55	1.43	1.39	1.33	1.21	1.1	1	0.92	0.84	0.76	0.71	0.64
II	1.08	1.05	1.04	1.02	1.02	1.02	1.02	1	0.99	0.99	1	1.01	1.02	1.01	1	1.01	1.01	1.02	1.02	1.03
DE	0.85	0.86	0.87	0.87	0.88	0.91	0.92	0.92	0.93	0.94	0.96	0.99	1	1.01	1	1	1.01	1.02	1.01	1.01
SU	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CN	1.12	1.07	1.08	1.11	1.15	1.18	1.18	1.19	1.17	1.13	1.11	1.09	1.06	1	1	0.97	0.92	0.9	0.89	0.89
SA	1.27	1.21	1.2	1.41	1.29	1.18	1.25	1.23	1.2	1.12	0.97	0.92	0.91	0.8	1	0.86	0.76	0.75	0.77	0.8
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table VI:: The relative price for Jordan key import partner (Pti/PtUS)

131

*Authors calculation based on data from World Development Indicators

year SA US CN IQ IN DE IT AE EG TR KP JP FR UK 1995 3.8 1 8.4 0.3 32.4 1.4 1629 3.7 3.4 0 771.3 94.1 5 0.6 1996 3.8 1 8.3 0.3 35.4 1.7 1703 3.7 3.4 0 771.3 94.1 5 0.6 1997 3.8 1 8.3 0.3 36.3 1.7 1703 3.7 3.4 0.1 804.5 108 5.1 0.6 1999 3.8 1 8.3 0.3 44.1 1.1 1.1 3.7 3.4 0.4 113.0 107.8 1.1 0.7 2001 3.8 1 8.3 0.3 44.5 1.1 1.1 3.7 4.5 1.5 1.1 0.7 2001 3.8 1 8.3<	RS	4.6	5.1	5.8	9.7	24.6	28.1	29.2	31.3	30.7	28.8	28.3	27.2	25.6	24.9	31.7	30.4	29.4	30.8	31.8	38.4
year SA US CN IQ IN DE IT AE EG TR KP JP FR 1995 3.8 1 8.3 0.3 35.4 1.629 3.7 3.4 0.1 804.5 108.8 5.1 1997 3.8 1 8.3 0.3 35.3 1.7 1703 3.7 3.4 0.1 804.5 108.8 5.1 1997 3.8 1 8.3 0.3 3.5.3 1.7 1703 3.7 3.4 0.1 804.5 108.8 5.1 1999 3.8 1 8.3 0.3 47.2 1.1 1.1 3.7 3.4 0.3 41.9 11.1 2001 3.8 1 8.3 0.3 47.2 1.1 1.1 3.7 4 1.2 1291 121.5 11.1 2001 3.8 1 8.3 0.3 47.5 1.3 0.3 130.7	UK	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
year SA US CN IQ IN DE IT AE EG TR KP JP 1995 3.8 1 8.4 0.3 35.4 1.5 1543 3.7 3.4 0.1 804.5 108.8 1995 3.8 1 8.3 0.3 35.4 1.5 1543 3.7 3.4 0.1 804.5 108.8 1997 3.8 1 8.3 0.3 34.3 1.0 1.7 1703 3.7 3.4 0.3 130.9 1999 3.8 1 8.3 0.3 44.3 1.0 1.1 1.1 3.7 4 1.2 130.9 2001 3.8 1 8.3 0.3 43.6 1.1 1.1 3.7 4 12.2 131 107.8 2001 3.8 1 8.3 0.3 43.6 0.9 0.3 3.7 5.1 121.1 130.9	FR	5	5.1	5.8	5.9	6.0	1.1	1.1	1.1	6.0	8.0	8.0	8.0	L^{0}	L^{0}	L^{0}	8.0	L^{0}	0.8	0.8	0.8
year SA US CN IQ IN DE IT AE EG TR KP 1995 3.8 1 8.4 0.3 32.4 1.4 1629 3.7 3.4 0.1 804.5 1996 3.8 1 8.3 0.3 35.3 1.7 1703 3.7 3.4 0.1 804.5 1997 3.8 1 8.3 0.3 36.3 1.7 1703 3.7 3.4 0.1 804.5 1999 3.8 1 8.3 0.3 43.1 0.9 0.9 3.7 3.4 0.1 804.5 1999 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.4 0.4 1189 2001 3.8 1 8.3 0.3 48.6 1.1 1.1 3.7 4.5 1.5 1131 2003 3.8 1 8.3 0.3 4.5 <t< th=""><th>JP</th><th>94.1</th><th>108.8</th><th>121</th><th>130.9</th><th>113.9</th><th>107.8</th><th>121.5</th><th>125.4</th><th>115.9</th><th>108.2</th><th>110.2</th><th>116.3</th><th>117.8</th><th>103.4</th><th>93.6</th><th>87.8</th><th>79.8</th><th>79.8</th><th>97.6</th><th>105.9</th></t<>	JP	94.1	108.8	121	130.9	113.9	107.8	121.5	125.4	115.9	108.2	110.2	116.3	117.8	103.4	93.6	87.8	79.8	79.8	97.6	105.9
year SA US CN IQ IN DE IT AE EG TR 1995 3.8 1 8.4 0.3 35.4 1.5 1543 3.7 3.4 0.1 1995 3.8 1 8.3 0.3 35.3 1.7 1703 3.7 3.4 0.1 1997 3.8 1 8.3 0.3 35.3 1.7 1703 3.7 3.4 0.1 1997 3.8 1 8.3 0.3 41.3 1.8 1736 3.7 3.4 0.2 1999 3.8 1 8.3 0.3 41.3 1.8 1736 3.7 3.4 0.3 2000 3.8 1 8.3 0.3 47.2 1.1 1.1 3.7 3.4 0.4 2001 3.8 1 8.3 0.3 47.2 1.1 1.1 3.7 4.5 1.5 2010 3.8 </th <th>KP</th> <th>771.3</th> <th>804.5</th> <th>951.3</th> <th>1401</th> <th>1189</th> <th>1131</th> <th>1291</th> <th>1251</th> <th>1192</th> <th>1145</th> <th>1024</th> <th>954.8</th> <th>929.3</th> <th>1102</th> <th>1277</th> <th>1156</th> <th>1108</th> <th>1127</th> <th>1095</th> <th>1053</th>	KP	771.3	804.5	951.3	1401	1189	1131	1291	1251	1192	1145	1024	954.8	929.3	1102	1277	1156	1108	1127	1095	1053
yearSAUSCNIQINDEITAEEG1995 3.8 1 8.4 0.3 32.4 1.4 1629 3.7 3.4 1996 3.8 1 8.3 0.3 35.3 1.7 1703 3.7 3.4 1997 3.8 1 8.3 0.3 34.3 1.7 1703 3.7 3.4 1997 3.8 1 8.3 0.3 41.3 1.8 1736 3.7 3.4 1999 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.4 1999 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.4 2000 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.4 2001 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.4 2002 3.8 1 8.3 0.3 44.9 1.1 1.1 3.7 3.7 2003 3.8 1 8.3 1455 45.5 0.9 0.9 3.7 5.9 2004 3.8 1 8.3 1453 45.5 0.8 0.8 3.7 5.7 2005 3.7 1457 44.9 0.8 0.8 3.7 5.7 2006 3.7 1457 44.1 0.8 0.8 3.7 5.7 2007 3.8 1 6.9 1170 <th>TR</th> <th>0</th> <th>0.1</th> <th>0.2</th> <th>0.3</th> <th>0.4</th> <th>0.6</th> <th>1.2</th> <th>1.5</th> <th>1.5</th> <th>1.4</th> <th>1.3</th> <th>1.4</th> <th>1.3</th> <th>1.3</th> <th>1.5</th> <th>1.5</th> <th>1.7</th> <th>1.8</th> <th>1.9</th> <th>2.2</th>	TR	0	0.1	0.2	0.3	0.4	0.6	1.2	1.5	1.5	1.4	1.3	1.4	1.3	1.3	1.5	1.5	1.7	1.8	1.9	2.2
year SA US CN IQ IN DE IT AE 1995 3.8 1 8.4 0.3 35.4 1.5 1543 377 1995 3.8 1 8.3 0.3 35.4 1.5 1543 377 1996 3.8 1 8.3 0.3 35.4 1.5 1543 377 1997 3.8 1 8.3 0.3 341.3 1.8 1703 377 1999 3.8 1 8.3 0.3 44.9 1.1 1.1 37 2000 3.8 1 8.3 0.3 48.6 1.1 1.1 37 2001 3.8 1 8.3 0.3 48.6 1.1 37 2002 3.8 1 8.3 0.3 48.6 1.1 37 2003 3.8 1 8.3 0.3 48.6 1.1 37 2004	EG	3.4	3.4	3.4	3.4	3.4	3.5	4	4.5	5.9	6.2	5.8	5.7	5.6	5.4	5.5	5.6	5.9	6.1	6.9	7.1
year SA US CN IQ IN DE IT 1995 3.8 1 8.4 0.3 35.4 1.4 1629 1996 3.8 1 8.3 0.3 35.4 1.5 1543 1996 3.8 1 8.3 0.3 35.3 1.7 1703 1997 3.8 1 8.3 0.3 41.3 1.8 1736 1997 3.8 1 8.3 0.3 43.1 0.9 0.9 2000 3.8 1 8.3 0.3 43.1 1.1 1.1 2001 3.8 1 8.3 0.3 43.1 0.9 0.9 2002 3.8 1 8.3 0.3 44.9 1.1 1.1 2003 3.8 1 8.3 0.3 44.3 0.9 0.9 2004 3.8 1 8.3 1453 45.3 0.8 0.8 <th>AE</th> <th>3.7</th>	AE	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
year SA US CN IQ IN DE 1995 3.8 1 8.4 0.3 32.4 1.4 1996 3.8 1 8.3 0.3 35.4 1.5 1996 3.8 1 8.3 0.3 35.4 1.5 1997 3.8 1 8.3 0.3 34.1 0.9 1997 3.8 1 8.3 0.3 44.9 1.1 2000 3.8 1 8.3 0.3 44.9 1.1 2001 3.8 1 8.3 0.3 48.6 1.1 2002 3.8 1 8.3 0.3 48.6 1.1 2003 3.8 1 8.3 0.3 48.6 1.1 2003 3.7 1 8.3 1453 45.3 0.8 2004 3.7 1 8.2 1472 44.1 0.8 2005 3.7	II	1629	1543	1703	1736	0.9	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
year SA US CN IQ IN 1995 3.8 1 8.4 0.3 32.4 1996 3.8 1 8.3 0.3 35.4 1996 3.8 1 8.3 0.3 35.4 1997 3.8 1 8.3 0.3 341.3 1997 3.8 1 8.3 0.3 41.3 2000 3.8 1 8.3 0.3 43.1 2001 3.8 1 8.3 0.3 44.9 2002 3.8 1 8.3 0.3 47.2 2003 3.8 1 8.3 0.3 45.6 2003 3.7 1 8.3 0.3 45.6 2003 3.7 1 8.3 1467 45.3 2003 3.7 1 8.3 1467 45.3 2003 3.7 1 8.3 1472 44.1	DE	1.4	1.5	1.7	1.8	0.9	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
year SA US CN IQ 1995 3.8 1 8.4 0.3 1996 3.8 1 8.3 0.3 1997 3.8 1 8.3 0.3 1997 3.8 1 8.3 0.3 1997 3.8 1 8.3 0.3 1999 3.8 1 8.3 0.3 1999 3.8 1 8.3 0.3 2000 3.8 1 8.3 0.3 2001 3.8 1 8.3 0.3 2002 3.8 1 8.3 0.3 2003 3.8 1 8.3 0.3 2004 3.7 1 8.3 1453 2005 3.7 1 8.2 1472 2003 3.7 1 8.2 1467 2006 3.7 1 8.2 1472 2007 3.7 1	Z	32.4	35.4	36.3	41.3	43.1	44.9	47.2	48.6	46.6	45.3	44.1	45.3	41.3	43.5	48.4	45.7	46.7	53.4	58.6	61
year SA US CN 1995 3.8 1 8.4 1996 3.8 1 8.3 1996 3.8 1 8.3 1997 3.8 1 8.3 1997 3.8 1 8.3 1999 3.8 1 8.3 2000 3.8 1 8.3 2001 3.8 1 8.3 2002 3.8 1 8.3 2003 3.8 1 8.3 2004 3.8 1 8.3 2005 3.7 1 8.3 2005 3.7 1 8.2 2006 3.7 1 8.2 2007 3.7 1 6.9 2008 3.8 1 6.9 2010 3.8 1 6.9 2011 3.8 1 6.8 2013 3.8 1 6.8 <	IQ	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2134	1453	1472	1467	1255	1193	1170	1170	1170	1166	1166	1166
year SA US 1995 3.8 1 1996 3.8 1 1997 3.8 1 1997 3.8 1 1997 3.8 1 1999 3.8 1 1999 3.8 1 1999 3.8 1 2001 3.8 1 2002 3.8 1 2003 3.8 1 2004 3.8 1 2005 3.7 1 2005 3.7 1 2006 3.7 1 2007 3.7 1 2008 3.8 1 2010 3.8 1 2011 3.7 1 2012 3.7 1 2013 3.8 1 2011 3.8 1 2012 3.8 1 2013 3.8 1 <t< th=""><th>CN</th><th>8.4</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.3</th><th>8.2</th><th>8</th><th>7.6</th><th>6.9</th><th>6.8</th><th>6.8</th><th>6.5</th><th>6.3</th><th>6.2</th><th>6.1</th></t<>	CN	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8	7.6	6.9	6.8	6.8	6.5	6.3	6.2	6.1
year SA 1995 3.8 1996 3.8 1997 3.8 1999 3.8 1999 3.8 2000 3.8 2001 3.8 2003 3.8 2004 3.8 2005 3.7 2006 3.7 2009 3.8 2009 3.8 2001 3.8 2003 3.8 2004 3.8 2005 3.7 2006 3.7 2003 3.8 2010 3.8 2011 3.8 2012 3.8 2013 3.8 2014 3.8 2013 3.8 2014 3.8 2013 3.8 2014 3.8	SU	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	l
year 1995 1996 1998 1999 2000 2001 2003 2004 2005 2005 2005 2005 2005 2006 2006 2007 2006 2007 2008 2007 2007 2008 2001 2001 2001 2001 2001 2001 2001	SA	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table VII: The nominal exchange rate for Jordan key trade partner per dollar (ERt)

* Data from database: World Development Indicators

۔ ۲	Development
-	.
	n anc
	5
•	ā.
	ਛ
	Ξ.
	Ř.
	H
	<u> </u>
,	<u>9</u>
ζ	3
(0) 21
	mc Co
ζ	omic Co
	nomic Co
C	onomic Co
C	conomic Co
۲	Economic Co
۲.	I Economic Co
۲.	of Economic Co
۲ -	al of Economic Co
(nal of Economic Co
(mal of Economic Co
(umal of Economic Co
(ournal of Economic Co

ſſ	0	0.1	0.2	0.3	0.4	0.6	1.2	1.5	1.5	1.4	1.3	1.4	1.3	1.3	1.5	1.5	1.7	1.8	1.9	2.2
TR	2.5	2.5	2.8	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.4	3.3	3.5	3.2	3.1	3.1	3.2	3.3
λW	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
QA	3.4	3.4	3.4	3.4	3.4	3.5	4	4.5	5.9	6.2	5.8	5.7	5.6	5.4	5.5	5.6	5.9	6.1	6.9	7.1
EG	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
КW	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8	7.6	6.9	6.8	6.8	6.5	6.3	6.2	6.1
CN	33	3.2	3.4	3.8	4.1	4.1	4.2	4.7	4.6	4.5	4.5	4.5	4.1	3.6	3.9	3.7	3.6	3.9	3.6	3.6
IL	2248.6	2342.3	2909.4	10014	7855.2	8421.8	10261	9311.2	8577.1	8938.9	9704.7	9159.3	9141	6696	10390	9090.4	8770.4	9386.6	10461	11865
B	1621.4	1571.4	1539.5	1516.1	1507.8	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5	1507.5
LB	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
AE	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
SA	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Z	32.4	35.4	36.3	41.3	43.1	44.9	47.2	48.6	46.6	45.3	44.1	45.3	41.3	43.5	48.4	45.7	46.7	53.4	58.6	61
Ŋ	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2133.8	1453.4	1472	1467.4	1254.6	1193.1	1170	1170	1170	1166.2	1166	1166
SU	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table VIII: The nominal exchange rate for Jordan key Export partner per dollar (ERt)

* Data from database: World Development Indicators

r								-	-							-		-	-	
RS	4.6	5.1	5.8	9.7	24.6	28.1	29.2	31.3	30.7	28.8	28.3	27.2	25.6	24.9	31.7	30.4	29.4	30.8	31.8	38.4
UK	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
FR	2	5.1	5.8	5.9	6.0	1.1	1.1	1.1	6.0	0.8	0.8	0.8	L.0	L.0	L.0	0.8	L.0	0.8	0.8	0.8
AE	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
N	32.4	35.4	36.3	41.3	43.1	44.9	47.2	48.6	46.6	45.3	44.1	45.3	41.3	43.5	48.4	45.7	46.7	53.4	58.6	61
QI	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2133.8	1453.4	1472	1467.4	1254.6	1193.1	1170	1170	1170	1166.2	1166	1166
JP	94.1	108.8	121	130.9	113.9	107.8	121.5	125.4	115.9	108.2	110.2	116.3	117.8	103.4	93.6	87.8	79.8	79.8	97.6	105.9
TR	0	0.1	0.2	0.3	0.4	0.6	1.2	1.5	1.5	1.4	1.3	1.4	1.3	1.3	1.5	1.5	1.7	1.8	1.9	2.2
KP	771.3	804.5	951.3	1401.4	1188.8	1131	1291	1251.1	1191.6	1145.3	1024.1	954.8	929.3	1102	1276.9	1156.1	1108.3	1126.5	1094.9	1053
EG	3.4	3.4	3.4	3.4	3.4	3.5	4	4.5	5.9	6.2	5.8	5.7	5.6	5.4	5.5	5.6	5.9	6.1	6.9	7.1
TI	1628.9	1542.9	1703.1	1736.2	0.9	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
DE	1.4	1.5	1.7	1.8	0.9	1.1	1.1	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
SU	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CN	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8	7.6	6.9	6.8	6.8	6.5	6.3	6.2	6.1
SA	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8
year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

Table IX: The nominal exchange rate for Jordan key import partner per dollar (ERt)

* Data from database: World Development Indicators