Briefing Notes in Economics

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About the Theory of the Worst Forms of Child Labour[♣]

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The eradication of the worst forms of child labour constitutes the prime objective of the International Labour Organisation. Two competing explanations for the worst forms of child labour are discussed in the economic literature. On the one hand, information asymmetry plays a major part. On the other hand, market structure plays a more important part. Both hypotheses seem insufficient to us. We emphasise the role of recruitment brokers on the child labour market. By way of conclusion, we propose to look into the issues at stake in the elaboration of targeted policies. **JEL Codes: J24, J82.**

Two recent papers propose an analysis of the worst forms of child labour, *i.e.* that of Dessy and Pallage (2005) on the one hand and that of Rogers and Swinnerton (2008) on the other[1]. The subject is a particularly important one in that the eradication of the worst forms of child labour constitutes the prime objective of the International Labour Organisation (ILO). In 1999, the ILO signed Convention C182 with a view to eliminating the worst forms of child labour, that is to say the forms of labour exposing children to physical and psychological stress, such as prostitution and pornographic activities, drug trafficking, deep sea fishing, debt bondage, or forced labour. The two above-mentioned papers are pioneer contributions dealing with this issue.

In their paper, Dessy and Pallage put forward three main hypotheses. Firstly, poverty drives parents to get their children to work. Secondly, parents are altruistic: they care about their children. Thirdly, the worst forms of child labour compromise the human capital of children. But, as Rogers and Swinnerton point out, if these hypotheses are to be accepted – in particular

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[1] The debate between these two contributions started far before their respective publication, as proved by other working papers – by both parties – already available in 2002.

parental altruism –, how then can the fact that children are placed into jobs harmful to both their physical and mental development be explained?

These two analyses propose very different answers. By way of illustration, Rogers and Swinnerton (2008) make information asymmetry play a major part. On the other hand, Dessy and Pallage reduce the role of information in their analysis, making market structure play a more important part. It seems to us that, in their paper, Dessy and Pallage minimise the role of information asymmetry when Rogers and Swinnerton do not describe sufficiently the underlying mechanisms conducive to such asymmetry.

It therefore appears crucial to untangle the role of the various proposed hypotheses insofar as the two analyses come to radically different conclusions on the policies for eradication of the worst forms of child labour. Dessy and Pallage thus consider that a ban on the worst forms of child labour provokes a drop in child wages, which contributes to increasing child labour. Rogers and Swinnerton, on the contrary, hold the view that eradication policies reduce information asymmetry and lead to Pareto efficiency.

In a first section, we set out to examine the role of the hypotheses developed in Dessy and Pallage's work, in comparison with Rogers and Swinnerton's. Such an approach leads us to explain the reason why their analysis seems insufficient to us. In a second section, we mean to emphasise the role of information asymmetry and of recruitment brokers on the child labour market. By way of conclusion, we propose to look into the issues at stake in the elaboration of targeted policies.

Information Asymmetry or Market Structure?

Dessy and Pallage (2005), but also Rogers and Swinnerton (2008), describe the child labour market as segmented and dual: it comprises exploitative and non-exploitative enterprises (Rogers & Swinnerton) or, in other words, enterprises which use the worst forms of child labour and enterprises which do not (Dessy & Pallage). To put it more simply, a distinction may be drawn between good and bad enterprises. Unlike bad enterprises, good enterprises do not resort to the worst forms of child labour or exploitation.

According to Rogers and Swinnerton (2008), parents facing asymmetric information cannot distinguish between bad and good enterprises. This asymmetry would therefore explain how parents may come to place their children in bad enterprises. Such a hypothesis is very strong though. If parents do not initially have information indeed, they eventually manage to get some with the passing of time, as well as through their repeated interactions with employers on the market. Parents then are in a position to penalise employers by taking their children out of bad enterprises for the purpose of incorporating them into good enterprises. Adopting a bad behaviour in such an environment can prove detrimental to enterprises which thus run the risk of being ousted from the market. Firstly, such a scenario entails an increase in child labour supply in good enterprises, and hence a drop in child wages. Secondly, to attract child labour, bad enterprises will be inclined to offer higher wages than good enterprises, which will contribute to increasing the cost of production. So in a competitive market, bad enterprises will tend to lose their competitiveness and thus disappear. Rogers and Swinnerton's model does not take this effect into account since it is a static one. It logically follows that as soon as the model becomes dynamic, the information asymmetry hypothesis appears very strong. Nevertheless, as Rogers and Swinnerton postulate, the model is valid if the economy is characterised by a dual structure with two dissociated sectors. It is to be underlined, however, that the sector of bad enterprises may be in a position to continue obtaining child labour only if it offers higher wages. Otherwise, parents do not have any reason to place their children in that sector, unless we consider there is information asymmetry as advanced by Rogers and Swinnerton. But, as underlined above, this hypothesis appears very strong.

Now, the wage differential between the two sectors is the premise of Dessy and Pallage's model. In a context of extreme poverty, parents, attracted by higher wages or promise of higher wages, make a rational choice when sending their children to the bad labour market. Parents acknowledge how harmful the worst forms of child labour may be. And yet they place their children in the sector of bad enterprises. The reason for this is that the extra pay so obtained – *i.e.* the fact that bad enterprises offer higher wages than good enterprises – largely compensates for the harm children undergo in that sector, compared to the harm they would undergo if they worked in the sector of good enterprises for a lower wage.

On these grounds, in a dual market, children who are taken out of bad enterprises will immediately be replaced by other children. So the existence of bad enterprises, and hence of the worst forms of child labour, results from the structure of the market.

It then appears crucial to know whether the existence of the worst forms of child labour derives from information asymmetry or from the structure of the market. The answer to such a question implies, indeed, radically different conclusions in terms of policy. According to Dessy and Pallage, the presence of the worst forms of child labour can provoke a rise in child wages. Along these lines, a ban on the worst forms of child labour therefore leads to a drop in child wages due to the influx of children in good enterprises which, other things being equal, forces parents to make their children work more. Conversely, Rogers and Swinnerton consider that a ban on the worst forms of child labour results in child wage rise since, in that case, bad enterprises are forced to behave like other enterprises. The fact that child labour demand in the sector of good enterprises increases more rapidly than child labour supply also contributes to increasing the wage of children.

The contribution of Dessy and Pallage therefore differs from that of Rogers and Swinnerton in that the former ascribe a major role to market structure. It is not that they deny information asymmetry, but this asymmetry appears highly insufficient within the framework of a repeated "interplay" between parents and enterprises.

Yet, it seems to us that information asymmetry plays a greater part than Dessy and Pallage consider. Nevertheless, we think it necessary to expand on and go beyond Rogers and Swinnerton's (2008) analysis. We should more particularly clarify the fact that information asymmetry persists over time, despite the repeated interactions of parents with the child labour market.

Most of the time indeed, poor households rely on brokers to find a job for their children, and parents do not have any information as regards such recruitments. We consider here that the main question is asymmetric information, not between parents and employers, but between parents and brokers working for employers. Repeated interactions with the market do not contribute to reducing asymmetric information insofar as parents are totally dependent upon brokers as far as information is concerned.

The Place of Brokers and the Brokerage System in Recruiting Children

In poor communities, parents rely on brokers to find a job for their children. According to Freeman (1979), a broker does not necessarily have a wide network or a high number of contacts. He has a central position though. When two individuals need a broker to get in contact, the latter certainly is responsible for them (Shimbel 1953), but he also has the power to keep information to himself, thus taking advantage of his central position in the network (Shaw 1954). According to Freeman (1977), the central position of an individual lies in his capacity to control the circulation of information within a network. It is up to brokers to

decide whether they are willing to divulge all the information they have at their disposal or to keep part of it to themselves. This gives them a comparative advantage over other individuals (Burt 2001). A broker can keep information to himself when he is the only intermediary between two unconnected persons (Freeman 1977).

Some industries – such as the brick kiln industry, stone quarries, or construction – use brokers to recruit labour force. Though these industries mostly employ adult labour force, child labour also is a common practice. Other industries strictly use child labour (*e.g.* the gem industry). Another phenomenon that is worth mentioning here is the fact that in poor rural areas where jobs are not available to all, households living in extreme poverty rely on the wage advance system for survival purposes. Brokers recruit labourers in return for an advance on wages viewed as an incentive to encourage prospective workers to migrate long distances. Bardhan and Rudra (1978) highlight the evidence that advances on wages are free of interest in rural India. Guérin *et al.* (2004) go along the same lines, adding further that such advances are given in several instalments. Recruited labourers first receive a lump-sum payment, the balance or remaining amount being spread over several subsequent instalments. Breman (1978), in his study of sugarcane cutters, shows how advances on wages are indirect. Sugarcane mill owners call their brokers for a meeting in the presence of their recruited labourers in a nearby city hotel. The owners then personally give the advance money to their brokers who are in charge of passing it on to the labourers concerned. Such a process is also observed in the case of brick kiln workers in South India only when the brokers involved are not trusted (Bhukuth 2005). Those brokers who have the confidence of brick kiln owners are free to give advances and recruit labourers. Labourers who have been granted an advance on wages must repay their debt to their creditor through their labour. They must work for the same broker until the debt is cleared in full.

The child labour recruiting industry also proceeds through this kind of principle. Brokers persuade parents to let their children migrate long distances. Brokers claim that children will thus acquire some specific skills that will ensure their future well-being. Brokers give parents an advance on wages in return for their children's hiring. At the time of recruiting child labour, the broker is careful not to divulge all of the information concerning working conditions. He specifies only the branch of industry which children are going to join and the benefits they can derive from such a job. Of course parents sometimes are given erroneous information on the industry itself. For instance, the intermediary may say he is looking for apprentices to some textile factory owners when, in fact, children end up in prostitution networks. The advance on wages actually is used as a means to persuade parents to let their children go. In the case of interstate migration, children lose their parental protection. This is particularly true of Indian children. Children then find themselves at the mercy of their employers. Brokers are not responsible for the children they have hired: their sole duty is to recruit child labour. Brokers are not concerned with working conditions and the way children are treated at the production site. Parents are not given such information and they believe that brokers will protect or take care of their children. In other words, they hand over their parental authority to brokers who sell or transfer it, in their turn, to employers. Such a process allows employers to sell bonded child labourers to others if they are not fully satisfied with their job or if they want to recover their debt quickly. In this environment, the exploitation of child labour may give rise to some alarming situations.

Other studies analyse the role of brokers in child labour. For example, Kanbargi (1988) and Gulrajani (1996) assert that in the Indian carpet industry, child labour is recruited through brokers. The industry is mainly present in the "Carpet Belt", in the state of Uttar Pradesh. Migrant child labour mostly comes from the state of Bihar. Children working in this industry

are bonded labour[2]. Brokers give parents a credit which children are requested to repay through labour. The fact that parents and brokers come from the same caste may contribute to dissipating parental doubts. To persuade parents to let their offspring go and be employed as labourers, brokers further argue that their children will learn a skill. In this particular instance, brokers are careful not to divulge all of the information about working conditions and how children will be treated. According to Bonnet (1996), bonded child labourers do not receive any wage, working long hours under inhuman working conditions. Children cannot earn a wage as long as their parents' debt has not been cleared in full. Furthermore, all of the children's mistakes increase the debt. Put differently, through their mistakes, children contract their own debt in their turn (Bonnet 1996). Employers recruit child labour from other states for two main reasons. Firstly, it is difficult for children to escape as they do not know the way back home. The second reason is that migrant child labour limits parental protection. Employers thus have a grip on the entire child labour force and may control children's working time according to their own best interest. Brokers use the poverty condition of households to recruit child labour. They give poor parents such a lump sum of money as they have never seen before.

Conclusion

The fact that the role of brokers is taken into account in the analysis of the worst forms of child labour does not deny market structure any role. Along these lines, the contribution of Dessy and Pallage emphasises a crucial element. It appears clear that the differential between child labour supply and demand urges parents to accept "attractive" offers. However, the only market imbalance argument is not sufficient to apprehend the situation of children. If we go by the reasonable hypothesis of parental altruism, most parents would not agree to place their children in enterprises endangering life. And if they do so it is due to the lack of relevant information on their children's labour.

Brokers play an essential part insofar as they supply the information and money. Money is a means used to persuade parents, in the form of an advance on wages granted even before children have started work. As for the information supplied, it often is distorted. To complete analysis, beyond the market structure argument, one should also study the networks enrolling children into jobs which, themselves, may be described as the worst forms of child labour.

Analysing child labour recruiting networks induces to wonder as well about the exact definition of the worst forms of child labour. As a matter of fact, the worst forms of child labour currently seem defined mainly according to the type of occupations involved. Now, if certain types of occupations are particularly harmful to children by nature (*e.g.* prostitution), others are as harmful even though they do not look so on the face of it. Rogers and Swinnerton thus refer to the example of children whom their parents place with distant relatives or strangers, in the belief that such placing will open up training opportunities for them. In actual fact, most of those children become domestic employees, who often are unpaid (Shapiro & Tambashe 2001).

UNICEF (2000) paints a dark picture of child abuse and exploitation of domestic employees. For instance, UNICEF (2000) distinguishes between two kinds of housemaids: *i)* housemaids living in their employer's house and *ii)* housemaids living in their parents' house. In the first case, children are vulnerable to the worst forms of child labour insofar as their parents are not

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[2] The most famous case of bonded child labour is that of Iqbal Massih who, at the age of 5, was sold by his mother for Rs2500. He was released by Eshan Khan, the leader of the Bonded Labour Liberation Front (BLLF), a Pakistani NGO. Iqbal Massih was murdered in 1996 (Harvey 1998).

in a position to monitor the way they are treated. In the second case, parents can decide to change employer when their children are maltreated. Yet, we should point out here that the distance between parents' home and workplace appears as an important factor of exploitation. When such a distance is big, parents cannot exert any control over the employer, even if the latter is not a stranger to them. So exploitation of child labour can be strong, especially when children reside with their employer and parents thus are not able to keep an eye on working conditions.

To conclude, the problem does not lie in the type of job as such, but in the parents' capacity to obtain information about their children's occupation. The risk of children being in harmful situations increases markedly when such information is very poor and parents lose control over it. Therefore, the issue of the worst forms of child labour may not be so much a question relative to the branch of industry where children are recruited – except for a few very precise sectors perhaps – but a question of degree of harmfulness of working conditions. The degree of harmfulness to children depends on the control parents may have over working conditions through information.

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Relationships between Japanese Stock Prices and Macroeconomic Variables during Quantitative Easing Period [♥]

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This paper provides the results of an empirical investigation of the relationship between recent Japanese stock prices and macroeconomic variables. Japan experienced a period of unprecedented recession and deflation for more than 10 years. During that period, the Bank of Japan (BOJ) enforced monetary easing at a level never seen before. There is much dispute over whether or not quantitative easing has been effective. The results indicate that domestic interest rate has not impacted the Japanese stock prices, nor has the exchange rate been a significant determinant of the Japanese stock prices. On the contrary, U.S. stock prices seem to have significant influence on Japanese stock prices. Moreover, there is a long-term, stable relationship between Japanese and U.S. stock market prices. **JEL Code: E44, F36.**

1. Introduction

Japan experienced unprecedented recession and deflation for more than 10 years. During that period, Japan introduced aggressive fiscal policies, and the Bank of Japan (BOJ) enforced unprecedented monetary easing. As these policies were inadequate to end deflation, since 2001, the BOJ has implemented quantitative easing. There is much dispute over whether quantitative easing has been effective (Kurihara, 2006).

One of the purposes of BOJ's policy is to influence stock price, although BOJ has not admitted to this purpose. The governor of BOJ has reiterated the importance of increasing the transfer of funds from safe to risky assets. The quantitative monetary easing policy is strongly related to this purpose.

This paper analyzes the macroeconomic factors of stock prices in Japan. All over the world, the most important factor in determining stock prices has been interest rates. It is natural and rational to think that interest rates have strong impact on stock prices. However, in Japan, market interest rates have been close to zero since the quantitative monetary easing policy began in 2001. The effect of changes in the interest rates on stock prices seems to have decreased to the point that it is negligible. There may be other macroeconomic factors that affect stock prices.

The following section reviews the relationship between the stock market and other markets. We then provide the theoretical framework for the analysis followed by application of the empirical method and analysis of the deterministic elements of stock prices in Japan. Finally, we conclude with a brief summary.

2. Relationship between the Stock Market and Other Macroeconomic Factors

The relationship between stock prices and macroeconomic variables has been discussed all over the world. Campbell (1987), Cutler et al. (1989), and Hodrick (1992) showed that short and long-term interest rates have a modest degree of forecasting power for excess stock returns. Similarly, other studies, such as those of Campbell and Shiller (1991) and Fama (1984), have shown that the slope of the term structure of interest rates helps to forecast excess stock returns. Campbell and Ammer (1993) and Hamori and Honda (1996) showed that short-term interest rates affect stock prices.

This paper discusses the determinants of daily stock prices in Japan. Daily stock prices are determined by many factors, including enterprise performance, dividends, stock prices of other countries, gross domestic product (GDP), exchange rates, interest rates, current account, money supply, employment, and so on. Countless factors have an impact on stock prices.

The factors that influence stock prices change over time. For example, in 1970s and early 1980s, inflation rates were high, which in turn affected stock prices. Since then, in general, interest rates have continued to have much influence on stock prices. However, this study mainly analyzes the period since March 19, 2001, when quantitative monetary easing was implemented in Japan. This paper focuses on a recent period, especially after the quantitative easing, and it is uncertain whether the interest rate has had an effect on stock prices since then.

Little research exists on the effect of the exchange rate on stock prices. Hamao (1988) investigated this relationship and found that the effect of exchange rate was insignificant for Japan, but Choi et al. (1998) reported that the exchange rate was an important factor. Since the 1980s, capital movement across countries has been dramatic. In spite of the reduction in fluctuations of the exchange rate in the 1990s compared to the 1980s, this movement should not be ignored. There still exists some possibility that exchange rate has been influencing Japanese stock prices.

The influence of macroeconomic variables and the relationships among them have been changing constantly, as we mentioned above. Under such circumstances, theoretical analysis is important. However, the research must also rely on empirical analysis.

3. Theoretical Framework / Empirical Method for Analysis

This paper starts with the unit root tests of all of the variables considered and uses an Augmented Dickey-Fuller (ADF) statistical test to determine whether the series is stationary. Standard inference procedures do not usually apply to regressions that contain an integrated dependent variable or integrated regressors as this violates the assumption of white noise disturbance.

Following the ADF statistical test, the present approach uses a cointegration test. We know that a linear combination of two or more nonstationary time series may be stationary. If such a stationary linear combination exists, the nonstationary time series is said to be cointegrated. The stationary linear combination is interpreted as a long-run equilibrium relationship among the variables.

Using this relationship, we then apply vector error correction (VEC) models. This model is a restricted VAR designed for use with nonstationary series that are known to be cointegrated.

The VAR sidesteps the need for structural modeling by treating every endogenous variable as a function of the lagged values of all the endogenous variables in the system. The VEC has cointegration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge with their cointegrating relationships while allowing for short-run adjustment dynamics.

The next step is the analysis of impulse responses. A shock to the i-th variable not only directly affects the j-th variable but is also transmitted to all of the other endogenous variables through the dynamic (lag) structure of the VAR. The impulse response function traces the effect of a one-time shock to one of the innovations on current and future values of the endogenous variables.

Relationships Among Variables

Economic theory offers relatively firm concepts for macroeconomic variables as related to stock prices. Stock prices are influenced not only by dividends and future expectations for the issuing company's performance but also by macroeconomic variables. Traditional study tells us that an increase (or decrease) in the interest rate usually induces the decline (or increase) of stock prices. However, empirical studies have produced varying results as mentioned above. In the case of interest rates in foreign countries, the influence on domestic stock prices is complicated. Usually, rising foreign interest rates induce a decrease in that country's stock prices, and as a result, domestic stock prices decrease. It is difficult to determine whether the effect of changes in the exchange rate is positive or negative. We can say clearly, however, that in an export-oriented country such as Japan, depreciation of the currency increases exports as well as stock prices.

4. Stock Prices and Macroeconomic Variables

General View and Sample Period

As mentioned above, one purpose of this study is to analyze stock prices in Japan since the quantitative easing policy was implemented on March 19, 2001.

Empirical Analysis

First, we conduct unit root tests of each macroeconomic variable related to stock prices. The variables estimated are Japanese stock prices (Jstock), U.S. stock prices (Ustock), the exchange rate (yen/U.S. dollar; EX), the Japanese call (interest) rate (Call), and the FF rate (FF). The test method is ADF. The sample period is between March 19, 2001 and September 30, 2005 and from January 1, 1992 to March 18, 2001. Some of the interest rates (Call and FF) are significant (at 1%); however, the other variables are not significant. All of the lagged variables are significant at 1%.

Regression Analysis

From this result we can see that the Japanese stock prices regressed as a result of changes in the U.S. stock price, exchange rate, and interest rates. The table provides the variables of the estimation equations and the estimated results by OLS.

Table Deterministic elements of the Japanese stock prices: Lagged first difference

Equation	(1)	(2)
Sample period	2001.3.19-2005.9.30	1992.1.1-2001.3.18
C	1.03 (0.24)	-10.73 (-0.81)
ΔJstock(-1)	-0.08 (-2.78)	-0.43 (-21.85)
ΔUstock(-1)	0.51 (12.39)	0.81 (5.66)
ΔEX	8.33 (1.25)	-7.93 (-0.55)
ΔFF(-1)	-99.63 (-2.22)	-97.51 (-1.77)
Δcall	-339.24 (-0.66)	-121.94 (-0.52)
D.W.	2.00	2.21
adj.R^2	0.13	0.19

Note. Parenthetical figures in the table are t values.

The results of equations (1) and (2) are not so clear, but they illustrate some interesting points. First, the sample period after the quantitative easing policy (March 19, 2001) is different from before the sample. Ustock coefficients are significant at 1%. The U.S. stock prices significantly affect the Japanese stock prices. The results are confirmative and show the existence of interdependence between the Japanese and the U.S. stock prices.

The coefficient for the exchange rate is positive in equation (1). It has been said that the Japanese economy is export-oriented. If the effect were strong, the coefficient would be positive and significant, because in such an economy, depreciation of the domestic currency usually promotes exports and leads to increasing stock prices. During the period of quantitative easing policy, the coefficient is positive but not significant.

It is interesting to see how the Japanese interest rate has no effect on the Japanese stock market. The Japanese interest rate has been quite low, so it has not had much effect on the Japanese stock market. Further, the coefficients are not significant.[1]

Cointegration Test

A linear combination of two or more nonstationary series are said to be cointegrated. The stationary linear combination may be interpreted as a long-run equilibrium relationship among the variables. The purpose of the cointegration test is to determine whether or not a group of nonstationary series are cointegrated. This section provides an unrestricted cointegration test. The lag interval is four according to Akaike Information Criterion (AIC) test. AIC can choose the length of a lag distribution by choosing the specification with the lowest value of the AIC. The sample period is during quantitative monetary easing. The results show the cointegration of trace test indices at 5%, which confirms that Japanese and U.S. stock prices can be interpreted as having a long-run equilibrium relationship between the variables. Both variables are nonstationary. Note, however, that the relationship between the two variables is significant. Rising U.S. stock prices influence the Japanese stock prices as previously confirmed.

VEC Analysis

A vector error correction (VEC) model is a restricted VAR designed for use with nonstationary series that are known to be cointegrated. The VEC model has cointegration relations built into the specification so that it restricts the long-run behavior of the endogenous

variables to converge to their cointegrating relationships while allowing for short-run adjustment dynamics. The result is shown in equation (3).

$$\Delta Jstock \; = \; -0.76Error - 0.25\Delta Jstock \, (-1) + 0.32\Delta Ustock \, (-1) \; - 0.32\Delta Ustock \, (-2) - 0.01 \qquad (3)$$
$$ (-15.16) \qquad (-5.90) \qquad\qquad (5.04) \qquad\qquad (-5.05) \qquad\quad (-0.01)$$

adj.R^2 = 0.53 ; F value = 237.83

Error = Jstock (-1) - 1.39Ustock (-1) + 0.98
$$ (-18.99)$$

The equation substantiates a long-term relationship between Japanese and U.S. stock prices.[2]

The coefficient of the error term is negative and significant. The results show that U.S. stock prices influence Japanese stock prices. Finally, we examine impulse responses based on this study.

Impulse Responses

An impulse response function traces the effect of a one-time shock to one of the innovations on current and future values of the endogenous variables. For stationary series, the impulse responses should die out to zero and the accumulated responses should asymptote to constant.

Based on equation (3), the impulse response function is as shown in the Figure.

Figure Impulse response function

Response to Cholesky One S.D. Innovations
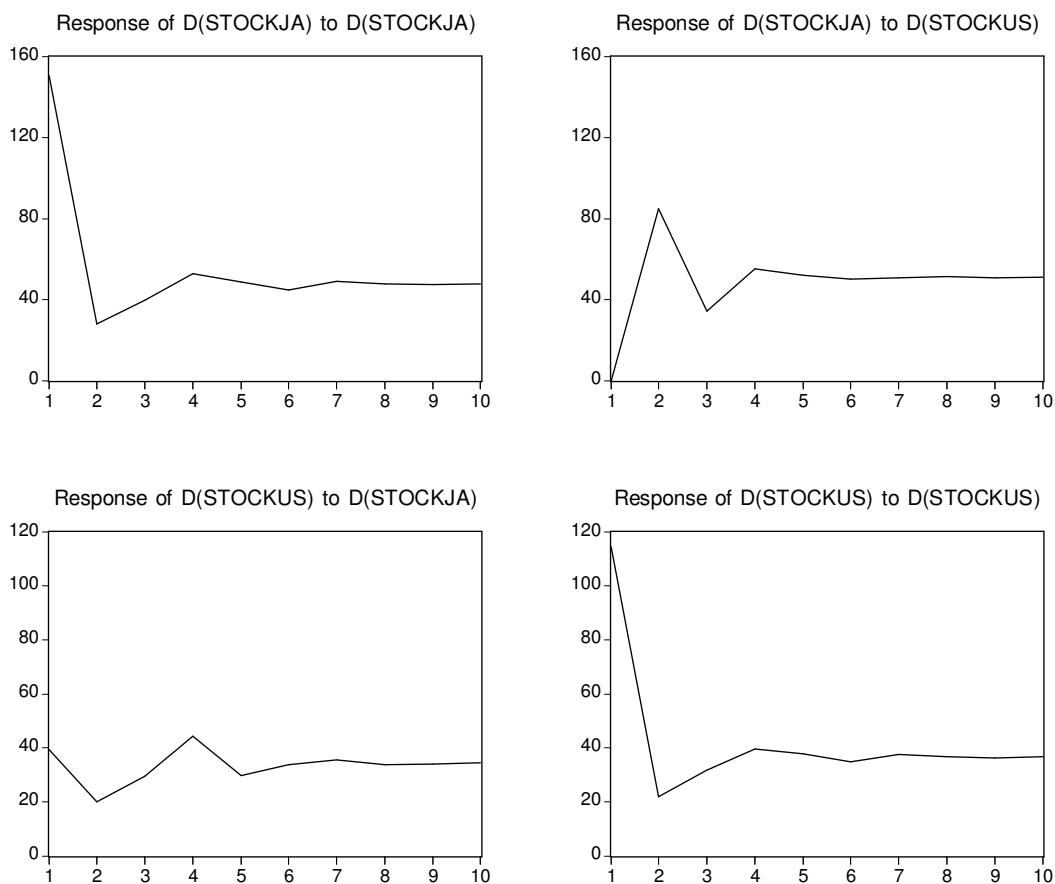
The results show that when U.S. stock prices rise, Japanese stock prices will also rise the following day. However, the shock fades in a week.

5. Conclusion

This study performed an empirical examination of the relationship between the Japanese stock prices and macroeconomic variables.

From the results, we could conclude that interest rates do not influence Japanese stock prices. This finding is counter to traditional economic theory and some existing studies. Interest rates in developed countries have not been high, so the results contain some instructive points for policy authorities. It could also be concluded that the exchange rate does not influence Japanese stock prices. More than interest rates and other macro economic variables, U.S. stock prices have been highly influential on Japanese stock prices, suggesting an interdependent relationship between them. Japanese companies have had strong ties with the U.S. economy and have been dependent on it. There is also a long-term stable relationship between the two variables. When U.S. stock prices rise, Japanese stock prices rise the following day and the shock fades in a week.

Notes

Along with the previous analysis, we estimated the equations using the logarithm; however, the results were not significantly different from the results obtained by this method. We performed AIC tests with several days' lag to determine the lag length. A 2-day lag was the most applicable.

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Book Review:

Ha-Joon Chang. *Rethinking Development Economics.* Published by Anthem Press. London. PP 544. 1-84331-110-0.

Rethinking Development Economics is a book edited by Ha-Joon Chang that includes twenty three essays that aim to give a better understanding to the science of development economics. The works included critically evaluate the achievements of the discipline over the years of its existence. The book was originally published in 2003 and since then has seen two more reprints, in 2004 and 2006. The articles are written by nineteen contributors, many of whom work in European institutions with the majority coming from British universities. Outside the UK, contributions were made from institutions based in India, Chile, USA, Holland, Italy, Norway and Malaysia. The papers were initially written for a workshop, called Cambridge Advanced Programme on Rethinking Development Economics, which was organized by the editor and was run in 2001 and 2002.

The book is divided into seven parts with an introduction written by Ha-Joon Chang. The structure of the book is well planned as it introduces the reader gradually into deeper topics of development. It begins with three chapters on the evolution of economic thought and its mainstream ideas (Part I Overviews) and continues with a part devoted to experiences of developing countries from East Asia, Latin America, Sub-Saharan Africa and Eastern Europe (Part II Development Experiences). The third part of the book evaluates dominant growth theories such as new growth theory and the dual sector model (Part III Structural and Sectoral Issues), which is followed by three chapters on issues dealing with industrial policies, strategies from growth through trade and assimilation of technologies (Part IV Trade, Industry and Technology). The following two sections deal with financial policies to promote development and to avoid financial crises and chapters on better understanding of the phenomena and eradication of poverty and diminishing income inequality (respectively Part V Financial Markets and Corporate Governance and Part VI Poverty and Inequality). The final section looks at the institutions behind markets and entire economies and offers advice on how institutions should develop and be introduced in order to promote rather than to obstruct development (Part VII Institutions and Governance).

The book provides a profound critique of current and past mainstream theories. It analyzes the (lack of) achievement of neoclassical economic theories and gives alternatives to the policies and organizations that have dominated the development field since the late 1970s. To be more precise, these are the liberal ideas of the Washington Consensus which have been promoted by the International Monetary Fund, the World Bank and the General Agreement on Tariffs and Trade (or its successor since 1995, the World Trade Organization). The contributors are

not afraid to go against the popular trends and to raise concern how neoliberalism has failed to achieve development and how various forms of liberalisation have caused more problems rather than solved. To these failures, the writers are providing alternative approaches that are often backed by vast literature, analysis and empirical evidence.

The book is designed mainly for graduate students of development economics as well as people working in the field. Furthermore many NGOs and even governmental institutions could learn from it and adjust their work by looking at some of the lessons within. The book could also serve as a wakeup call to the Bretton Woods institutions to reform their work and style of promoting development, though this would be highly unlikely outcome considering the already existing vast literature that criticizes their work.

The book, however, should not be limited to people who are interested in development only. It could be useful to those who work with or study economics as it provides both alternative ideas and an analysis that appears to be fresh and new when compared to most of the other mainstream publications. Readers from other social sciences such as political science, history and international relations may also find its approach interesting, though may be discouraged by the level of economics in some chapters (particularly the chapters in Part V). While offering a fresh look at the overall experience of development economics, it has to be noted that none of the critiques expressed in *Rethinking Development Economics* are really new – many of them have been raised as concerns for as long as neoliberalism existed.

On the downside, it must be mentioned that the book also has a certain outdated feel. Unfortunately, this is not because the issues inside have been successfully addressed. The reason is that with the current worldwide economic crisis, neoliberal economics have taken another blow. Many of the articles focus on the decade of the 90s simply because those were the latest figures when the book was initially published. As a result many current issues, which could support the arguments inside, are not being addressed. It would be also interesting to see whether recent experiences could force the Bretton Woods institutions to readjust their policies to accommodate more heterodox approaches to answering the world's call for development.

Furthermore, the location of the last section feels odd. While its contents provide the reader with a very interesting analysis of institutions, which is the natural progression, one feels that these chapters could have been placed more successfully in the early parts of the book. The prime example is the article by Barbara Harris-White (On Understanding Markets as Social and Political Institutions in Development Economics). It feels that having the chapter in earlier section of the book would have provided better understanding of many of the topics that would have followed it. Indeed, after reading her contribution, one inevitably starts raising questions and may consider a reread of some of the earlier parts.

As a final note, despite some minor flaws, *Rethinking Development Economics* is an excellent book that provides an enlightening critique of the neoliberal policies over the past three decades. It is well assembled and provides lectures by many well-known economists who have devoted their work to the field of development. For more information, visit the publisher's website (http://www.anthempress.com). It is also worth mentioning that most of the chapters are available online for free at http://books.google.com, which gives an excellent opportunity to read some of it before purchasing the entire volume.

Petar Kanev

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