DOES GLOBALIZATION AFFECT HUMAN WELL-BEING?

(Accepted 14 March 2006)

ABSTRACT. The prevailing theorizing of globalization's influence of human well-being suggests to assess both the favorable and unfavorable outcomes. This study formulates a dialectical model, adopts a comprehensive globalization measure and uses a three-wave panel data during 1980–2000 to empirically test direct and indirect effects of global flows' human consequences. The outcomes from random effect modeling reveal significant positive impacts of political globalization, whereas economic and social globalization do not generate favorable influences when development level and regional differences are operated as controls. The overall globalization index is found to generate expected favorable influence on an overall human development index. Within developing countries, globalization's human influence was not as significant as in industrial countries, however. Several hypotheses about globalization's potential negative effects through increasing societal instabilities and reducing state power and social spending are not supported in analysis. It is concluded that globalization identified by increased global flows and exchanges contributes rather than hampers progress in human welfare.

KEY WORDS: globalization, human welfare, state, social structure, panel data

1. INTRODUCTION

Globalization's impact on economic efficiency and growth outcomes conventionally had drawn most research attention (Garrett, 2000; Nyahoho, 2001; Dreher, 2006a). A recent article published in *Social Indicators Research* by Sirgy et al. (2004) forcefully propose that globalization's potential impact on quality of life (QOL) should receive similar research efforts. Globalization, defined as "the diffusion of goods, services, capital, technology, and people (workers) across national borders" by Sirgy et al. (2004, p. 253), is considered to be a multifaceted diffusion process that produces significant influences in human well-being. This article (Sirgy et al., 2004) proposes 24 theses to demonstrate global linkages and a country's general socio-economic progress, concluding that globalization is a double-bladed phenomenon; that is, both positive and adverse effects generated by this pervasive global transformation require careful specification of various mechanisms in research design. The work of Sirgy et al. (2004) open up a 'brave new world' of QOL research. Whereas Sirgy et al. (2004) had developed a new set of theoretical propositions to account for variation among countries in progress of human well-being, their picture of globalization and human QOL, all-embracing as a grand project should be, requires further theoretical elaboration and reformulation. In addition, their effort is primarily speculative at this stage, and urgently needs empirical investigation. This study contributes in offering a theoretical model and providing empirical evidence by testing the hypothesized relationship between globalization and human well-being.

2. HUMAN WELL-BEING AND GLOBALIZATION AS DOUBLE-BLADED PHENOMENA

Globalization manifests itself as a fundamental change of human institutions in the contemporary era. While the literature agrees that the rapid and intensive flows and connections of goods, services, money, people and culture beyond national borders indeed define the fundamental characteristics of the current world society (Guillén, 2001), its human consequences remain unsettled. Two theories prevail in debate over how globalization affects human well-being. The neoliberal school contends that globalization is an omnipresent power of 'creative destruction' in that global trade, crossborder investment and technological innovation enhance productive efficiency and generate extraordinary prosperity despite old jobs are replaced and the wages for unskilled workers necessarily fall. Globalization manages these potential threats by signaling to the latter group about the pay-offs from acquiring additional skills. Benefits can spread over the masses 'if the labor market is responsive to changes in supply and demand' (Grennes, 2003). Relevant empirical studies additionally documented that globalization had operated to spread industrialization into developing countries (DCs) and thus reduced global income inequality (Firebaugh, 2004). Economic integration approximated by foreign trade was found to be closely related to institutional building of a society, which constituted a decisive factor of economic growth (Rodrik et al., 2004).

The second approach sees globalization as a new hegemonic project that transnational capitals operated in ways that promised few betterments for most countries. According to Petras and Veltmeyer (2001), globalization demonstrates a creation of a new world order architectured by global powers (the industrial countries, international financial institutes, etc.) to facilitate capitalist accumulation in an environment of unconstrained market transactions. Petras and Veltmeyer (2001, p. 24) foresee 'a world-wide

104

crisis of living standards for labor': the brunt of the capitalist globalization process has been borne by the working class, as 'technological change and economic reconversion endemic to capitalist development has generated an enormous and growing pool of surplus labor, an industrial reserve army...with incomes at or below the level of subsistence.' For critics of globalization, contemporary global systems on its mainly neoliberal course had imposed a 'flexible' mode of production that undermined the redistributive mechanisms that were built up through the Keynesian social democracy. Globalization features a 'market ethos' whose fervent pursuit of private interests operates without regard for persons (Smart, 2003). Resultantly, an unequal allocation of benefits and harms is generated that favors the already advantaged (Scholte, 2000). Although this radical position was not explicitly endorsed by Sirgy et al. (2004), they do predict several negative outcomes following this line of reasoning, thus suggesting assessment of globalization's "double-bladed" outcomes.

This study attempts to offer an integrative model that clarifies a plethora of mechanisms by which globalization generates favorable and unfavorable human consequences. Sirgy et al. (2004) explicitly asserts the important role of the state in enhancing a decent life condition in this global age. Yet, how such state actions emerge or fail to appear is not satisfactorily specified in the current debates from the neoliberal and radical camps (Petras and Veltmeyer, 2001; World Bank, 2002). Neither in Sirgy et al. (2004). Formal elaboration of the relationship of the state and globalization is thus important to arrive at a better understanding of the issues at hand.

2.1. The Effect of Globalization: A Dialectic Model

In assessing the impact of globalization on a country's quality of life, Sirgy et al. (2004, p. 271) hypothesize that global flows of goods create more jobs, increase wage level in the export sectors, and lower the prices of imported goods, thus contributing to purchasing power of the exporting country. In countries that have succeeded in promoting economic exchanges (trade, capital, etc.) across borders, increase in economic and social welfare is much likely to occur. Take technology for instance, Sirgy et al. (2004, p. 288) assert that "Inflows of new technology contribute the organizational efficiency and performance of local firms,...allow local firms to produce cultural products, which contribute to the cultural well-being of local people" as this aspect of global flows involves 'frequent cross-cultural communications, training, services activities.' Moreover, increased choice of foreign goods consumption clearly is also assessed as a plus in the list of

globalization influences. In general, these rationales adopt a conventional economic thinking that globalization can be characterized by expansion of free trade and economic openness (World Bank, 2002). In light of comparative advantage theory, globalization necessarily offers many favorable outcomes ranging from an enlarged size of market through access to innovative ideas to more investment opportunities abroad.

Without limiting conceptualization of globalization narrowly to transbordered trade and exchanges, Sirgy et al. (2004) highlight global flow via cultural interaction, and contend that increase in transnational corporations (TNCs) and foreign workers provides natives with opportunities to interact with people with diverse cultural, racial and religious backgrounds. Exposure to foreign cultures and goods enriches life styles or 'the cultural well being of local people' (Proposition 18, pp. 288–289).

What is most interesting is the *caution* Sirgy et al. (2004) take in assessing potential diverse outcomes of various global flows. Adverse impacts can emerge as a country's interdependence with the world society expands. Take inward investment for instance. While increases in inward investment has a positive influence on economic well-being of the country residents due to more jobs created from the operations of foreign firms, it likely generates a negative influence via loss of jobs in domestic firms (Prop. 10, p. 284). Moreover, inward investment augments access to better products at lower prices and contributes to consumer well-being; yet, it often depletes natural resources (Prop. 12, p. 285). Such contradictory outcomes also occur in outgoing investment capital as it facilitates productive linkages and promotes trades; but it reduces jobs for domestic workers (Prop. 7, p. 283).

Technology is the only element whose adverse influences are not assessed as Sirgy et al. (2004) concentrate on its positive contributions ranging from technology transfer through enhanced organizational performance to cheaper products to domestic consumers (Props. 13–18). Yet the relevant literature documented its negative impacts: foreign technology allows TNCs to outperform the local ones, thus increasing unemployment. Higher wages paid by TNCs in certain countries notwithstanding, only a limited group of workers were hired in the capital-intensive sector of TNCs. More jobs were created in labor-intensive agricultural and manufacturing production at the cost of poor working conditions (Kiely, 1998, p. 59). Petras and Veltmeyer (2001, p. 24) contend that demand of labor had grown more slowly than its supply, leading to an enlarged "industrial reserve army" at the global society living on insecure jobs with incomes at the level of subsistence.

To better frame globalization's positive and adverse effects simultaneously this study proposes to exploit a "dialectical model" that specifies various pathways on which global flows impact QOL for a country. Although Sirgy et al. (2004) did not adopt such conceptualization, they are clearly aware that specification of globalization's double-sided, contradictory human influences better captures its modus operandi (p. 295). Simply put, globalization implies diverse forces and conflicting effects, in which increased efficiency and opportunities are juxtaposed with intensified exploitation, insecurities and risks. Other researchers also highlighted such dialectical processes. As Wolfe (1995, p. 83) investigated international migration from a social exclusion perspective, 'within the global system more people are becoming permanently superfluous, irrelevant, or hindrance to its functioning...the globalized system generates exclusion through its logic as well as through its precariousness,' despite 'many of them eventually achieve satisfactory terms of incorporation and even save the economies of their countries of origin from collapse through their remittances' (see also George and Wilding, 2002). What is now at issue is through what mechanisms the global system generates or avoids human underdevelopment.

2.2. Globalization, Societal Instability, and the State

Arguably a country immersed in vast global flows may encounter greater external exposures that lead to greater societal instability. As Marx and Engels ([1948]1978, p. 476) long pointed out, the dynamic revolutionizing of production for the world market necessarily generated 'uninterrupted disturbance of all social conditions everlasting uncertainty and agitation.' The dominant global forces had imposed institutional changes on countries highly dependent on external demands. To have greater access to 'world market' or foreign credits promised by the World Trade Organization (WTO), World Bank and the International Monetary Fund (IMF), countries needed to initiate 'free market reform' ('structural adjustment programs'), irrespective of their national economic situations. These imposing practices accentuated an asymmetrical power within the global system to the disfavor of DCs in particular. In many countries following market-oriented prescriptions, social disequilibrium such as increased unemployment as well as rural emigration resulted as a consequence of failing economies, as many African and Latin American countries had demonstrated (Geo-Jaja and Mangum, 2001; Boafo-Arthur, 2003). The literature also compared East Asian states before and after the financial crisis of 1997 as evidence that

unregulated global financial flows (including *internationalized* domestic firms) inflicted painful adjustment costs on the domestic population (Hirst and Thompson, 1999, p. 142; see also Riain, 2000).

Critics of globalization believe that it necessarily produces unfavorable human influences additionally by weakening the capacity of the state. Agencies of globalization (the WTO, IMF, etc.) had pressured governments to undertake market-oriented reforms by reducing fiscal expansion and cutting social spending. As high taxes will encourage capital to migrate, countries that wish to keep the existing TNCs and highly skilled labors within the territories have few alternatives but to bring down their tax to the levels prevailing elsewhere. A likely outcome is a government forced to decrease public resources for welfare provisions (Panić, 2003, p. 27).

However, Sirgy et al. (2004) propose an alternative hypothesis of an expanded state in globalization: certain inflows such as trade and capitals can increase tax revenue (Prop. 9, p. 283), allowing the state to spend more in areas such as health care, education, public safety and leisure that are important for human well-being (Prop. 9, p. 283, also p. 294). In contrast to a group of "hyper-globalists" that predict reduced government power to control "national" resources surpassing borders (Ohmae, 2000), Sirgy et al. (2004) maintain that social protection policy depends on a responsive state, which predicates on its effective capacity to intercept revenues by taxing global glows of capitals and goods over its territory.

In accordance with certain researchers (Hirst and Thompson, 1997), Sirgy et al. (2004) agree that in the global age, the state must construct a distributive coalition and achieve social consensus in ways that major organized interests, domestic or foreign, are accustomed to bargain over developmental goals and make commitments to these policies. The national government remains an influential agency with extensive public resources and powers to sustain social stability. Evidence from industrial countries had documented that societies that are highly exposed to external risks developed a larger government as shelter. Openness might translate into more generous social programs (Rodrik, 1997). Globalization *increases* rather than suppresses the likelihood of compensation policies. Concerning this hypothesis, Garrett (2001) believes that the state generally failed to compensate losers in globalization as his crossnational evidence indicated low correlations between trade and total government spending. However, Garrett's (2001) measure of state compensation (the size of the state) is not adequate to reveal state effort improving social securities. The causal relationship between in

globalization, state power and social protection remains unsettled and needs empirical testing by exploiting better measures and including DCs as sample.

2.3. A Causal Model of Globalization and Human Well-being

The preceding elaboration of the insightful work of Sirgy et al. (2004) is summarized in the Figure 1, where the intricate relationships between global flow, systematic instability, state power, compensation policy and human well-being are mapped out in a causal scheme that features a plethora of favorable (+) and adverse (-) influences. Three major hypotheses appear in this model: (1) Global flows have a direct positive influence in human wellbeing. (2) Global flows can produce positive influences by providing the state opportunities to extract more resources and to spend more on social securities, which enhance human well-being. (3) However, global flows likely operate to increase societal instability that reduces state authority, which in turn impedes the well-being of the masses. This third hypothesis accomplishes globalization as double-bladed phenomena in influencing human welfare.

The following of this study is devoted to empirical testing of the proposed causal model by a panel data of countries. We first explain methodological procedures and then report findings from a time-series and cross-sectional design. We discuss important policy implications to conclude this study.

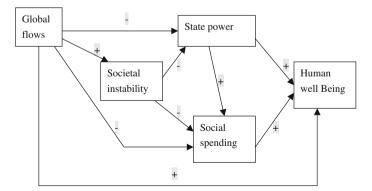


Fig. 1. A dialectical model of globalization and human well-being.

3. DATA AND METHODS

3.1. The Sample

Previous research on globalization had relied on cross-country data of a certain period for empirical testing (Rodrik, 1997; Garret, 2001). While researchers are able to detect differences in comparing countries, the weakness is that they failed to observe changes of certain structural features and their correlates over times. As we are interested in the globalization of individual countries, that is, increased levels of global flows, we decided to collect country information from different periods to build a panel data. One advantage of a pooled data is to have a larger number of observations that give more precise estimates and have test statistics with more power. More importantly, a panel data allows assessment of dynamic causality in a time-series situation close to natural experiment that a change in QOL of a country can be attributed to changes of certain hypothesized factors (Wooldridge, 2003). In practice, this study mobilized the data of 112 countries in three waves of 1980, 1990 and 2000. DCs with a population less than one million were excluded to avoid confounding influences of the potential state idiosyncrasies.

3.2. Measures

3.2.1. OOL. To measure the quality of life at country level, this study adopted United Nations' human development index (HDI) as a summarizing proxy. The Index aims to measure level of a society's progress in enlarging people's freedom, capacities and choices leading to enjoy a decent standard of living (United Nations, 2005). As a weighted composite measure, the index comprises: (1) life expectancy, (2) adult literacy, (3) combined primary, secondary and tertiary school enrolment, and (4) adjusted GDP per capita (PPP US\$). Several merits of this well-known index can be noted. In contrast to selective one-sided focus on either the end or the means in certain composite indicators, the HDI is specifically designed to include both (Booysen, 2002). In Hagerty et al.'s (2001) comparative assessment of QOL indexes, the HDI was evaluated as "satisfactory in having a clear public focus" and "excellent in the general level of aggregation in its purpose of providing an assessment of development". However, this index fall short of capturing subjective domains that some researchers consider as equally important. Individual happiness or life satisfaction that had been recommended to measure psychological well-being is not available as timeseries data for most countries (Veenhoven, 2006). Bjørnskov et al. (2005)

documented in a cross-sectional analysis that a country's level of life satisfaction is not significantly associated with a globalization index. More research is needed to devise a composite well-being index in which both objective and subjective QOL can be incorporated. This study decided to concentrate on objective QOL. Basic statistics of the analyzed QOL indicators are displayed in the appendix.

3.2.2. *Globalization*. To capture the variety of global flows, this study exploited an index of globalization developed by Dreher's (2006a) as proxy. This set of globalization measures comprises three domains that will be used as independents: economic, political, and social globalization. Economic globalization is indicated by: (1) actual flows of trade, foreign direct investment, portfolio investment, and income payments to foreign nationals; and (2) less economic restriction as measured by hidden import barriers, mean tariff rate, taxes on international trade, and capital account restriction. Political globalization constitutes three elements: (1) embassies in country, (2) membership in international organization, and (3) participation in UN Security Council Missions. Finally, social globalization represents three major exchanges: (1) personal contact (outgoing telephone traffic, international tourism, foreign population, etc.), (2) information flows (telephone mainlines, internet host, internet users, etc.), and (3) cultural proximity (indicated by number of McDonald's restaurants). The components of a certain aspect of globalization were transformed on a zero to ten scales before the principle components technique was used to construct a weighted summary index for individual dimensions of globalization. Dreher (2006a) also offers an overall globalization index. Using these globalization indexes Dreher (2006a) was able to find economic integration to be positively correlated with a country's growth rate while the other two globalizations had insignificant influences during the period of 1970–2000. Dreher (2006b) further documented that this globalization measure decreased tax rates but showed no significant impact on reduced social spending for OECD countries.

3.2.3. Societal Instability. State Revenue and Social Spending. This study defined societal instability of a country as a situation in which social structures experienced perturbations that were unpredictable and uncontrollable (Cutcher-Gershenfeld and Rebentisch, 2003). Three instabilities are assessed. The first element is price inflation, which demonstrates a situation that moves the economy away from its equilibrium and likely causes inequitable redistribution of income among social groups as well as undesirable

stagflationary spirals (Alexander and Alexander, 1996). High inflation also hurts the welfare of the general consumers, a phenomenon that Sirgy et al. (2004) concerns much. The second element is unemployment that indicates increasing labor market insecurities. As some researchers argued, footloose global capital, empowered by its new mobility and flexibility, created 'a global auction for jobs' that made real wage fall and threatened employment securities even in western countries (Brown and Lauder, 2001, p. 111). Third, rapid growth of urban population as an additional instability measure reveals the potential difficulties a country encounters in having an expanded population in cities competing for public resources and life chances unavailable in rural areas (Smith, 2000). Because the concept of instability implies *unpredictability* rather than *level* of perturbation of a system, this study calculated the standard deviation of GDP deflator, unemployment rate, as well as urban population growth rate during three intervals (1971-1980, 1981–1990, and 1991–2000) in operation (World Bank, 2004). Wider variability of these measures indicates more severe systemic instabilities.

3.2.4. State Power and Social Spending. State revenue was used to indicate the strength of a government. It is argued that a state that has high capacity to extract large resources from the society demonstrates its autonomous power over the general population (Tsai, 1999). State revenue is computed as a percentage of current revenue (excluding grants) of the central government of GDP (World Bank, 2004). Social spending is calculated as the percentage of the central government spending on social securities and welfare. The International Monetary Fund (2002) provided reliable timeseries data of this measure.

3.2.5. *Control Variables.* In assessing human well-being, this study considered several control factors. As documented in previous research, development level of a country is one critical element in improving human development (Ranis et al., 2000; Tsai, 2006). This study used gross national income per capital to differentiate development level across countries (World Bank, 2004). The natural logarithm was taken to reduce the skewness of the variable. Population growth was also included as a control (World Bank, 2004), as the literature had long documented the harmful impacts of unchecked fertility against limited resources, such as attenuated health and educational expenditure, insufficient housing and sanitary water, and so on, particularly in DCs (Goldthorpe, 1996). Finally, this study also introduced a set of regional dummies to capture potential peculiar effects in Sub-Saharan Africa, Latin America and South Asia, the poorest regions

among the continents. An effect coding design rather than conventional dummy variables was exploited in order to assess these regions' difference in human well-being from the mean of the study sample (Pedhazur, 1982). This method is most useful in the situation that the 'reference group' is not a well-specified collectivity.

3.3. Estimation Model

This study uses the GLS random effect estimation model as this method has merits in recognizing the unobservable cross-sectional heterogeneity (such as regime and climate differences) in panel data and treating them as uncorrelated with other observable factors (Wooldridge, 2003). This model estimates:

Humanwell-being_{ii} =
$$\beta_0 + \beta_1 C_{it} + \beta_2 X_{it} + A_{it} + u_{it}$$

where C is a vector of control variables, and X indicates our explanatory variables, which were lagged and averaged over a decade. Note that in the last part of the equation that A, the unobservable country effect, has zero correlation with explanatory variables and is 'fixed' *overtime*; u is the residual term with normally distributed random disturbances. Additionally, i indicates individual country and t three analyzed periods. Although some variables have missing information, the GLS estimation is robust to an 'unbalanced' data. Throughout this study random effect estimation was applied to assess the determinants of social instability, state power and government social spending. Conventional techniques for evaluating mediated effects such as path analysis or structural equation modeling were not used due to their incapacity of specifying the composite errors in panel data. Note that in order to avoid short-term fluctuations, this study computed the explanatory variables as averages of the individual periods.

4. ANALYSIS AND RESULTS

Table I displays the regression results of modeling the HDI on globalization variables when simultaneously considering the influences of several controls. With regards to the controls, as expected, a nation's wealth generated favorable influence, and population growth had adverse impact on human development. Regional variables also accounted for considerable variation, with Sub-Saharan Africa as well as South Asia lagging far behind the world's average level. Latin America, however, shows relatively better performance than average. The estimation model did not include several

TABLE I

Globalization and human well-being: estimation of globalization's direct effects

	1	2	3	4
GNI per capita logged	0.87*** (0.04)	0.89*** (0.03)	0.90*** (0.04)	0.83*** (0.04)
Population growth	-0.06*(0.03)	-0.05(0.03)	-0.06*(0.03)	-0.05(0.03)
African effect dummy	-0.85*** (0.11)	-0.80*** (0.10)	-0.84*** (0.11)	-0.85*** (0.10)
Latin America effect dummy	0.58*** (0.11)	0.61*** (0.11)	0.58*** (0.11)	0.60*** (0.11)
South Asia effect dummy	-0.47* (0.19)	-0.50** (0.18)	-0.47* (0.19)	-0.48** (0.18)
Economic globalization	0.02 (0.02)			
Political globalization		0.06** (0.02)		
Social globalization			-0.01(0.03)	
Overall globalization				0.07* (0.03)
Constant	-0.62* (0.30)	$-0.93^{**}(0.28)$	-0.82** (0.34)	-0.48(0.30)
Quasi- R^2 (N)	0.90 (306)	0.90(306)	0.90(306)	0.90(306)

Note: Random effect estimates (s.e.) in entries.

p < 0.05; p < 0.01; p < 0.01; p < 0.001.

cultural and social factors that researchers considered as crucial elements in human development. For instance, Caldwell (1990) suggested that parental educational level, preference for sons over daughters, intrafamilial flow of resources, as well as the secularization of health behavior are important factors in social modernization of a country. Nevertheless, the usage of both a country's income level as well as population growth rate should be able to represent these modernization elements and allow this study to adequately evaluate globalization's partial effects.

The effects of individual globalization elements on various well-being indicators are presented in individual columns on Table I. On column 1, it was found that economic globalization have a weak correlation with the HDI, although its positive causal direction is as expected. Political globalization, whose measurement focuses on formal international linkages with other countries, is positively associated with the HDI. Notably, a country's engagement in the international political system can bring into domestic policy arenas supraterritorial interests such management of epidemic, human rights issues or global environmental concerns, which contributed to progress of human well-being. There is no denying that certain international political collaborations have often served the narrow interests of global capital or powers. Scholte (2000, pp. 139–140) maintains that the contemporary state had become a site of struggle between territorial and global interests, breeding ambiguous, sometimes, conflicting domestic policies.

Generally, the potential human benefits from political globalization were notable despite potential setbacks.

Social globalization does not have substantial impact on HDI. As social globalization indicates intensive flows of cultural and information exchanges between people across countries, some authors (Scholte, 2000) contend that its impact might be observable in enhancing cosmopolitan solidarity, forging hybrid identity or encouraging openness to alternative knowledges. However, social globality as such likely has been restricted to privileged classes. Thus, as for enhancement of human capacities and choices, social globalization appears to have little influence.

The last column evaluates the predictive power of the overall globalization index. This summary measure exerted significant positive effect on HDI. The results obtained from the testing of globalization's human impacts suggest that fine-tuning is needed as *not* all aspects of human wellbeing benefits from various global flows. In comparison to economic and social globalization, political globalization's human impact is noteworthy.¹

The radical approach of globalization maintains that globalization is essentially a process of unequal exchange in which the industrial societies fostered their interests via subordination of DCs by agencies such MNCs or international financial institutes (Schneider, 2003; Irogbe, 2005). Globalization represents a global system of domination that openness may actually allow foreign firms to extract precious societal resources such that human welfare is severely hampered for much population among DCs. To test this special hypothesis, empirical modeling should exploit only the subsample of DCs. A replication was performed for all models in a smaller sample excluding 22 rich OECD countries. The finding indicates that both political and overall globalizations' influence on HDI were attenuated to insignificance level. The results did not lend support to the radical school that anticipates significant negative human consequences. But it is equally noteworthy that DCs as a whole clearly did not benefit much from increased global interactions, an outcome against the hyper-globalist theory.

Tables II–IV together assess the hypotheses regarding globalization's impact on social stability and state structure.² Table II reports regression outcomes for three instability proxies. It was found that overall globalization is negatively associated with the disruption of inflation, an outcome contrary to what was expected. That is, with other crucial factors (development level and regional differences) being simultaneously evaluated, globalization *reduced* rather than encouraged instability as far as the price factor is concerned. The other two proxies of instability did not receive significant impacts from globalization. Other researches also noted a

	S.D. of inflation		S.D. of unemployment	ment	S.D. of urban population growth	population
	1	2	3	4	5	6
GNI per capita logged	-0.24* (0.11)	-0.26* (0.11)	0.27 (0.29)	0.03 (0.25)	0.08 (0.12)	0.14 (0.12)
African effect dummy	-0.10(0.21)	-0.13 (0.20)	2.14^{***} (0.46)	2.06^{***} (0.46)	0.10(0.19)	0.22(0.19)
Latin America effect dummy	0.96^{***} (0.21)	$0.95^{***}(0.20)$	-0.21(0.34)	-0.14(0.34)	-0.24(0.19)	-0.23 (0.20)
South Asia effect dummy	$-1.01^{**}(0.34)$	-0.98^{**} (0.34)	-1.06(0.63)	-1.12(0.64)	-0.03(0.32)	-0.12 (0.32)
Economic globalization	-0.12(0.07)		0.03(0.13)		0.00(0.07)	
Political globalization	-0.04(0.06)		(60.0) (0.00)		-0.18^{**} (0.06)	
Social globalization	-0.11 (0.12)		-0.30(0.21)		0.08 (0.12)	
Overall globalization		-0.27*(0.11)		$0.01 \ (0.20)$		-0.12(0.11)
Constant	4.47^{***} (0.85)	$4.60^{***}(0.78)$	-0.11 (2.24)	1.97 (1.83)	0.27(0.90)	-0.45 (0.83)
Quasi- R^2 (N)	0.25(303)	0.25(303)	0.25 (130)	0.23(130)	0.06 (302)	0.02 (307)

TABLE II

Regression estimation of societal instabilities: the impacts of globalization

Note: Random effect estimates (s.e.) in entries. *p < 0.05; **p < 0.01; ***p < 0.001.

116

MING-CHANG TSAI

positive relationship between openness and absence of disequilibrium by using foreign trade (Nyahoho, 2001) as predictor of inflation and unemployment rate in a cross-sectional design. One the basis of a panel design Calderón et al. (2005) also found that trade and fiscal openness helped enhance growth and avoid external shocks. In accordance with these researches, the current study asserts that deepening connectedness across borders is associated with socio-economic stabilities.

The dialectical model specifies another possible pathway in which globalization hurts human well-being by way of reducing state power as well as social spending. To test this hypothesis of downward pressures on public provisions, central government revenue as indicator of state power was modeled on globalization, instabilities and other controls. Table III reports the regression results. The empirical outcomes indicated that economic, political, and overall globalizations generated favorable effect on state revenue (columns 1 and 2). Thus rather than weaken state power, globalization was found to increase the state's revenue-extracting capacity, rejecting the hypothesis of constrained state capacity in the global context.

Two out of the three instability factors also produced significant impacts on state revenue (columns 3–5 of Table III). On the one hand, larger variation of unemployment appeared to be associated with more state revenue, an outcome disconfirming the instabilities thesis. The correlation pattern remained unchanged if only DCs were used as samples. On the other hand, velocity of urban population substantially decreased state revenue, providing favorable evidence for the instability hypothesis. Systemic instabilities thus have equivocal effects in influencing state power.

Even if globalization does not assault on the state, many researchers believe that it is hostile to state-provided social security (Geo-Jaja and Mangum, 2001; Panić, 2003). Table IV investigates relationships among social spending, globalization and other variables. Several findings are notable. First, for countries that had achieved high development level, they were capable of allocating a larger portion of public spending on social securities even in the era of globalization. Second, all globalization measures this study adopted except economic globalization had substantial positive influences on social spending. This outcome does not reveal any trace of human threats of 'deepened marketedness' that critics of globalization had foreboded – at best the relationship between economic integration and welfare spending stayed next to independent. However, caution should be taken in endorsing these globalization effect as they became considerably attenuated when only DCs were analyzed: only social globalization registered a significant coefficient (b = 3.90, p < 0.05), while the political as well as the overall globalization

Ξ	
ЕE	
B	
ΤA	

Regression estimation of state revenue: influences of globalization and structural instabilities

	1	2	3	4	5
GNI per capita logged	0.69 (0.82)	0.09 (0.79)	2.01* (0.95)	1.10 (1.01)	2.18* (0.87)
African effect dummy	1.59 (1.65)	1.01(1.61)	2.80 (1.83)	-0.42(3.46)	3.55 (1.83)
Latin America effect dummy	-1.06(1.66)	-0.72 (1.63)	-1.49(2.01)	-1.24 (2.32)	-2.44 (1.95)
South Asia effect dummy	-5.04 (2.72)	-4.86(2.69)	-5.93(3.28)	-4.20(4.36)	-5.80(3.24)
Economic globalization	1.54^{**} (0.51)				
Political globalization	1.59^{***} (0.44)				
Social globalization	-0.96(0.90)				
Overall globalization		3.07^{***} (0.81)			
S.D. of inflation			-0.50(0.49)		
S.D. of unemployment				1.14*(0.48)	
S.D. of urban population growth					-1.67^{**} (0.49)
Constant	5.16(6.33)	$11.76^{*}(5.80)$	4.34 (7.95)	7.49 (8.79)	2.74 (6.92)
Quasi- R^2 (N)	0.30 (273)	0.30 (274)	0.13 (313)	0.24 (138)	0.15 (313)

118

MING-CHANG TSAI

	1	2	3	4	5	9
GNI per capita logged	4.09*** (0.73)	4.03*** (0.68)	4.35*** (0.70)	6.81*** (1.26)	4.40*** (0.66)	3.88*** (0.64)
African effect dummy	0.10 (2.05)	-0.48 (2.10)	-2.10 (2.25)	-3.82 (4.44)	-1.87 (2.28)	-2.56 (2.30)
Latin America effect dummy	-0.22 (2.11)	-0.75 (2.18)	-0.52 (2.51)	-1.25(3.29)	-0.51 (2.53)	-0.46 (2.56)
South Asia effect dummy	-1.96(3.65)	-1.83(3.79)	-4.29 (4.40)	-0.97 (6.78)	-4.21 (4.43)	-5.33(4.49)
Economic globalization	0.36(0.43)					
Political globalization	1.18^{**} (0.39)					
Social globalization	$2.99^{***}(0.79)$					
Overall globalization		3.48^{***} (0.80)				
S.D. of inflation			-0.04(0.32)			
S.D. of Unemployment				$1.10^{*} (0.54)$		
S.D. of urban population growth					0.39(0.34)	
State revenue						-0.06(0.04)
Constant	$-26.56^{***}(5.96)$	-26.47^{***} (5.45)	-21.11^{***} (5.92)	-42.52*** (10.77)	$-26.56^{***}(5.96) -26.47^{***}(5.45) -21.11^{***}(5.92) -42.52^{***}(10.77) -21.75^{***}(5.35) -16.15^{***}(5.36) -26.47^{***}(5.92) -21.75^{**}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{***}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.75^{**}(5.92) -21.7$	-16.15^{**} (5.36)
Quasi- R^2 (N)	0.62 (223)	0.59 (223)	0.41 (258)	0.38 (117)	0.41 (260)	0.38 (249)

TABLE IV

Regression estimation of government social spending

119

Note: Random effect estimates (s.e.) in entries. p < 0.05; **p < 0.01; ***p < 0.001.

index failed in statistical test. George and Wilding (2002) surveyed recent evolutions in social provisions among OECD countries and concluded that these security systems were deeply embedded in government institutions that change was slow, despite some downward pressures from attempting a 'competition state' in the global economy. In contrast, many DCs experienced observable impacts by adopting neoliberalism as a growth model, resulting in reduced government commitment to social provisions. Thus, poor economic development combined with neoliberal ideology might account for limited coverage of social security in DCs. Third, agitation of employment insecurities accelerated government social spending, indicating that societal instability of this sort had appeared urgent and therefore received more government attention than did rising inflation or a rising flood of migrants towards the metropolitan areas. Finally, regression estimation from the last column revealed a weak relationship between state revenue and social spending. The zero-order correlation coefficient of the two variables is as low as 0.25. Our case checking reveals considerable incongruence: while advanced industrial societies generally registered high state revenue and social spending, among DCs, some governments with relatively high revenues (for instance, Nigeria and Kenya) did not allocate these public resources onto social spending. In contrast, some governments that were not particularly rich fiscally, such as Argentina and Brazil, were quite generous in social provisions. Incongruence within DCs appears to decrease the association between state revenue and social security efforts in the 'global' sample.

Table V evaluated the influence of state revenue and social spending in human well-being, to accomplish empirical testing of the last part of the dialectical model.³ When the effects of wealth, population growth rate, regional differences and globalization were considered, state revenue did not generate observable effect, a result belittling the role of state power in this model. However, further checking by using only DCs in analysis found favorable impact on HDI of this variable (b = 0.006, p < 0.05, on column 3). Thus the importance of sufficient government revenue cannot be emphasized too much as the governments in DCs, when they are equipped with sufficient finance, is willing to afford more social protection for the population.

Social spending exerted a favorable effect on HDI (see also Ranis et al., 2000). However, among DCs, this effect is not significant, perhaps due to a smaller sample in analysis. In one critical research of comparative QOL that reported a weaker effect of social spending than that of national income (a finding much similar to this study's), Williamson (1987, p. 222) contends that 'increase the level of economic development should be made a stronger case if a choice has to be made between policies that increase level of

TABLE V

Effects of state revenue and government social spending on human well-being

	All samples		Developing cour	ntries
	1	2	3	4
GNI per capita logged	0.82*** (0.04)	0.84*** (0.05)	0.91*** (0.05)	0.95*** (0.06)
Population growth	-0.05 (0.03)	-0.04 (0.03)	-0.03 (0.03)	-0.01 (0.04)
African effect dummy	-0.86*** (0.11)	$-0.85^{***}(0.11)$	$-0.76^{***}(0.11)$	-0.76^{***} (0.12)
Latin America effect dummy	0.62*** (0.11)	0.67*** (0.12)	0.62*** (0.12)	0.65*** (0.13)
South Asia effect dummy	-0.45* (0.19)	-0.49* (0.20)	-0.33 (0.20)	-0.37 (0.21)
Overall globalization State revenue	0.09** (0.03) 0.004 (0.003)	0.05 (0.04)	0.11* (0.04) 0.006* (0.003)	0.07 (0.06)
Government social spending	. ,	0.008* (0.004)		0.006 (0.005)
Constant	-0.49 (0.30)	-0.65 (0.36)	-1.37*** (0.35)	-1.56^{***} (0.45)
Quasi- R^2 (N)	0.91 (271)	0.91 (222)	0.87 (205)	0.88 (162)

Note: Random effect estimates (s.e.) in entries.

p < 0.05; ** p < 0.01; ***p < 0.001.

economic development and those that increase spending on social security programs, a stronger case can be made for increasing level of development.' The empirical finding of this study additionally support this opinion that social spending is a less decisive factor in enhancing human well-being than is national wealth.

5. CONCLUSION

This study investigated the effect of globalization on progress in human well-being by using a time-series cross-national data during 1980–2000, a period that observed an extremely high tide of global flows crossing borders to deepen international economic integration, establish supranational governance, and foster cultural harmonization. By way of engaging in the debate initiated by Sirgy et al. (2004) concerning the potential relationships between global flows and human QOL, this study specifies a dialectical model to clarify the complex double-bladed processes in which globalization is hypothesized to have generated contradictory human consequences.

The empirical evidence supports the positive effect hypotheses that globalization produces favorable influence in human development.

Somewhat surprisingly, the main effect of globalization is primarily contributed by political globalization. It appears that as the national states are deeply involved in what is called 'transgovernmental networks,' they can develop close relationships with numerous public, international non-governmental and private commercial bodies to deal with domestic policy issues such as human resources, health and environments, and in this way benefit from the global system (George and Wilding, 2002). Economic globalization perhaps has an affinity with the neoliberal policy that might have offset its potential contribution to human well-being. Social globalization encourages intercultural exchanges whose welfare effect is not as remarkable as expected. On the other had, the adverse effect hypothesis of the dialectical model does not receive much support. Those countries that had experienced more global flows and exchanges did not resultantly demonstrate social structural instabilities, reduce state revenue, and trim down social securities spending. Although the current literature together proposes dialectical effects of globalization on human well-being, the evidence this study gathered tilted toward the argument for globalization rather than against it.

But why the adverse human consequences of globalization anticipated by its critics was not present in the current study? It is speculated that for those societies that had obtained higher levels of globalization, institutional reforms might have been accomplished and thus have mitigated the social frictions and economic setbacks associated with rapid 'fluxes and flows' (Rodrik, 2004). Notably, DCs that remained relatively closed and delinked with other societies might have certain institutional weaknesses that have deterred them from benefiting via globalization. In sum, from the cross-national research perspective, that globalization should shoulder primary responsibility of human underdevelopment in contemporary era is at best a postulation rather than a social fact grounded on solid empirical evidence.

Two limitations of this study should be indicated. First, in measuring human QOL, subjective well-being is not used due to data scarcity. Investigation into this psychological dimension can enrich understanding of human impacts of global transformation. Second, globalization as the radical school conceives to be 'predatory,' that is, global capital combined with neoliberal regimes (minimizing economic regulation, tightening fiscal discipline, unrestricted currency repatriation, etc.) imposing over governments operating at the level of sovereign state, is not fully evaluated (Falk, 1999). In contrast to global flows, this aspect of global hegemony needs empirical assessment to arrive at full understanding of globalization's human consequences.

ACKNOWLEDGEMENT

The author thanks professors Christian Bjørnskov, Axel Dreher, Andrew Sharpe and Joe Sirgy for their valuable comments on earlier drafts of this paper.

APPENDIX

TABLE A1

	Wave 1	Wave 2	Wave 3	Sources
Economic globalization	2.77 (1.65)	3.28 (1.63)	3.85 (1.53)	Dreher (2006)
Political globalization	3.51 (1.77)	2.57 (1.45)	3.56 (1.89)	Dreher (2006)
Social globalization	0.92 (0.97)	1.15 (1.19)	1.91 (1.52)	Dreher (2006)
Overall globalization index	2.28 (1.19)	2.28 (1.19)	3.04 (1.33)	Dreher (2006)
HDI index	6.35 (1.88)	6.69 (1.87)	7.06 (1.85)	United
				Nations (2005)
S.D. of inflation	2.06 (0.89)	2.03 (1.50)	2.20 (1.74)	World Bank (2004)
S.D. of unemployment	_	1.63 (1.06)	2.08 (1.81)	World Bank (2004)
S.D. of urban population	0.49 (0.47)	0.34 (0.34)	0.67 (2.03)	World Bank (2004)
growth				
State revenue	21.46 (10.63)	24.24 (12.28)	20.64 (9.77)	World Bank (2004)
Social securities spending	15.46 (15.51)	15.91 (15.22)	20.61 (15.92)	International
				Monetary Fund (2002)
Gross national income per capita logged	7.77 (1.10)	8.22 (1.16)	8.60 (1.22)	World Bank (2004)
Population growth (annual %)	2.25 (1.72)	2.02 (1.22)	1.56 (1.20)	World Bank (2004)

Means (S.D.) of variables and the analyzed countries

The country list (N = 112): Albania, Algeria, Australia, Austria, Bangladesh, Benin, Bolivia, Botswana, Brazil, Bulgaria, Burundi, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Congo (Dem. Rep.), Congo (Rep.), Costa Rica, Cote d'Ivoire, Croatia, Czech, Denmark, Dominican, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Mauritius, Mexico, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovak, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Syria, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Venezuela, Zambia, Zimbabwe.

NOTES

¹ The testing of the globalization effect might have been rendered too "conservative" as one control variable – GNI per capita – tended to be highly correlated with GDP per capita such that influences of other predictors were likely suppressed. For remedy, this study additionally used three relevant component indicators – life expectancy, literacy rate and infant mortality – as dependents and conducted re-estimation. The results showed that economic globalization generated significantly favorable impacts on life expectancy, and all but political globalization measures produced positive impact on infant mortality. Literacy's positive association with globalization is somewhat weak as only overall globalization generated observable influence (p = 0.056)(details not shown here but available upon request). As was found from Table I, globalization measures did not exert any negative effects on these component indicators.

² To avoid confounding the time-order in causal inference the globalization variables were lagged ten years (1975, 1980 and 1990) to predict stabilities and state characteristics measured during 1971–1980, 1981–1990 and 1991–2000 in regression models.

³ Three instability measures' influence in HDI was estimated and neither reached statistical significance when controls used on Table V were applied. These results are not shown here.

REFERENCES

- Alexander, E. and S. Alexander: 1996, 'Inflation as an endogenous economic instability, a dynamic model', Canadian Journal of Economics 24, pp. s188–s191.
- Bjørnskov, C., A. Dreher and J. V. V. Fisher: 2005, 'Cross-country determinants of life satisfaction: exploring different determinants across groups in society', Discussion paper no. 2005-19, Department of Economics, University of St. Gallen, Switzerland. http://www.vwa.unisg.ch/RePEc/usg/dp2005/DP-19_Ju.pdf.
- Boafo-Arthur, K.: 2003, 'Tackling Africa's developmental dilemmas: Is globalization the answer?', Journal of Third World Studies 20, pp. 27–54.
- Booysen, F.: 2002, 'An overview and evaluation of composite indices of development', Social Indicators Research 59, pp. 115–151.
- Brown, P. and H. Lauder: 2001, Capitalism and Social Progress: The Future of Society in a Global Economy (Palgrave, New York).
- Calderón, C., N. Loayaz and K. Schmidt-Hebble: 2005, Does Openness Imply Greater Exposure?. World Bank Policy Research Working Paper, #3733 (World Bank, Washington, DC).
- Caldwell, J. C.: 1990, 'Cultural and social factors influencing mortality levels in developing countries', The Annals of American Academy of Political and Social Science 510, pp. 44–59.
- Cutcher-Gershenfeld, J. and E. Rebentisch: 2003, The impact of instability on complex social and technical system. Engineering systems division, Massachusetts Institute of Technology, unpublished paper. http://esd.mit.edu/Faculty_Pages/joelcg/joelcg.htm.
- Dreher, A.: 2006a, 'Does globalization affect growth? Evidence from a new index of globalization', Applied Economics, 38, pp. 1091–1110.
- Dreher, A.: 2006b, 'The influence of globalization on taxes and social policy an empirical analysis for OECD countries', European Journal of Political Economy, 22, pp. 179–201.

Falk, R.: 1999, Predatory Globalization: A Critique (Polity, Cambridge).

- Firebaugh, G.: 2004, 'Accounting for the recent decline in global income inequality', American Journal of Sociology 110, pp. 283–312.
- Garrett, G.: 2000, 'The causes of globalization', Comparative Political Studies 33, pp. 941-991.

- Garrett, G.: 2001, 'Globalization and government spending around the world', Studies in Comparative International Development 35(4), pp. 3–29.
- Geo-Jaja, M. A. and G. Mangum: 2001, 'Structural adjustment as an inadvertent enemy of human development in Africa', Journal of Black Studies 32, pp. 30–49.
- George, V. and P. Wilding: 2002, Globalization and Human Welfare (Palgrave, New York).
- Goldthorpe, J. E.: 1996, The Sociology of Post-colonial Societies (Cambridge University Press, Cambridge).
- Grennes, T.: 2003, 'Creative destruction and globalization', Cato Journal 22, pp. 543-558.
- Guillén, M. F.: 2001, 'Is Globalization civilizing, destructive or feeble? A critique of five key debates in the social science literature', Annual Review of Sociology 27, pp. 235–260.
- Hagerty, M., R. A. Cummins, A. L. Ferris, K. Land, A. C. Michalos, M. Peterson, A. Sharpe, J. Sirgy and J. Vogel: 2001, 'Quality of life indexes for national policy: Review and agenda for research', Social Indicators Research 55, pp. 1–96.
- Hirst, P. and G. Thompson: 1997, 'Globalization in question: international economic relations and forms of public governance', in J. R. Hollingsworth and R. Boyer (eds.), Contemporary Capitalism: The Embeddedness of Institutions, Cambridge University Press, Cambridge, pp. 337–360.
- Hirst, P. and G. Thompson: 1999, Globalization in Question 2nd ed. (Polity, Cambridge).
- International Monetary Fund: 2002, Government Finance Statistics Yearbook (Washington, DC, various years).
- Irogbe, K.: 2005, 'Globalization and the development of underdevelopment of the Third World', Journal of Third World Studies 22, pp. 41–68.
- Kiely, R.: 1988, 'Transnational corporations, global capital and the Third World', in R. Kiely and P. Marfleet (eds.), Globalization and the Third World, Routledge, London, pp. 45–66.
- Marx, K. and F. Engels: [1948]1978, Manifesto of the Communist party, in R. C. Tucker (eds.), The Mark-Engels Reader, (2nd edition). W. W. Norton, New York, pp. 469–500.
- Nyahoho, E.: 2001, 'Globalization and economic goals', The Journal of Social, Political, and Economic Studies 26, pp. 543–568.
- Ohmae, K.: 2000, 'The end of the nation state', in F. J. Lechner and J. Boli (eds.), The Globalization Reader, Blackwell, Oxford, pp. 207–211.
- Panić, M.: 2003, Globalization and National Economic Welfare (Palgrave, New York).
- Pedhazur, E. J.: 1982, Multiple Regression in Behavioral Research (Holt, Rinehart and Winston, New York).
- Petras, J. and H. Veltmeyer: 2001, Globalization Unmasked (Zed, London).
- Ranis, G., F. Stewart and A. Ramirez: 2000, 'Economic growth and human development', World Development 28, pp. 197–219.
- Riain, S.: 2000, 'States and markets in an era of globalization', Annual Review of Sociology 26, pp. 187–213.
- Rodrik, D.: 1997, Has Globalization Gone too far? (Institute for International Economics, Washington, DC).
- Rodrik, D., A. Subramanian and F. Trebbi: 2004, 'Institution Rule: the primacy of institutions over geography and integration in economic development', Journal of Economic Growth 9, pp. 131–165.
- Schneider, G.: 2003, 'Globalization and the poorest of the poor: Global integration and the development process in Sub-Saharan Africa', Journal of Economic Issues 37, pp. 389–396.
- Scholte, J. A.: 2000, Globalization: A Critical Introduction (St. Martin's, New York).
- Sirgy, M. J., D. J. Lee, C. Miller and J. E. Littlefield: 2004, 'The impact of globalization on a country's quality of life: toward an integrated model', Social Indicators Research 68, pp. 251– 298.
- Smart, B.: 2003, Economy, Culture and Society: A Sociological Critique of Neo-liberalism (Open University Press, Buckingham).

- Smith, D. A.: 2000, 'Urbanization in the World-System: A retrospective and prospective', in Thomas D. Hall (ed.), A World-System Reader, Rowman & Littlefield, Boulder, pp. 143–168.
- Tsai, M.: 1999, 'State power, state embeddedness, and national development in less developed countries: A cross-national analysis', Studies in Comparative International Development 33(4), pp. 66–88.
- Tsai, M.: 2006, 'Does political democracy enhance human development in developing countries? A cross-national analysis', American Journal of Economics and Sociology 65(2), pp. 233–268.
- United Nations: 2005, Human Development Report, 2005 (Oxford University Press, New York) (and previous years).
- Veenhoven R.: 2006, States of Nations, World Database of Happiness. Internet site: http:// worlddatabaseofhappiness.eur.nl.
- Westra, R.: 2004, 'Globalization and the pathway to sociomaterial betterment', Review of Radical Political Economics 36, pp. 381–390.
- Williamson, J.B.: 1987, 'Social security and physical quality of life in developing countries: a cross-national analysis', Social Indicators Research 19, pp. 205–227.
- Wolfe, M.: 1995, 'Globalization and social exclusion: some paradoxes', in G. Rodgers, C. Gore and J. Figueiredo (eds.), Social Exclusion: Rhetoric, Reality, Responses, International Labor Office, Geneva, pp. 80–101.
- Wooldridge, J.: 2003, Introductory Econometrics: A Modern Approach (South-Western, Mason, Ohio).
- World Bank: 2002, Globalization, Growth and Poverty (Oxford, New York).
- World Bank: 2003, World Development Report: Sustainable Development in a Dynamic World—Transforming Institutions, Growth and Quality of Life (Oxford, New York).
- World Bank: 2004, World Development Indicators 2004 (CD-ROM) (World Bank, Washington, DC).

Department of Sociology National Taipei University 67 Sec.3 Min-Sheng E. Rd., Taipei104 Taiwan Email: mtsai@mail.ntpu.edu.tw