Social Protection in Asia: Coverage, Generosity and Stratification

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Abstract

Existing studies of comparative social welfare commonly use aggregated government social spending as a measure of social protection. While straightforward to compare across countries, this measure reveals little about the policy choice and design of welfare programs, or about the associated distributional implications and consequences. I develop and propose a multidimensional conceptualization of social protection, disaggregating social protection along three dimensions—generosity, coverage and stratification—to better explore the distributional aspects of social welfare policy. Using data on 37 Asian countries from 2005 to 2010, I find that democracy is not necessarily associated with broader or more generous social welfare provisions; instead, democracy (mainly the democratic mechanisms such as election and political participation) can mitigate the inequality of social welfare provisions, indicated by significantly lower levels of stratification of social protection in democracies compared to non-democracies. I also find that globalization (specifically, economic openness) is associated with broader coverage of social protection; however, the proponents of the “race to the bottom” argument are also correct in the sense that the generosity of social protection decreases with economic openness.

Keywords: social protection, Asia, coverage, generosity, stratification
1. Introduction

The study of social welfare provision in the developing world constitutes a dynamic, rapidly growing area of research in the field of comparative political economy.¹ To evaluate trends in the provision of social welfare, existing studies typically rely on aggregated government social spending as measure of social protection. This measure, however, reveals little about the policy choice and design of welfare programs; the mix of various social programs (including social insurance, social assistance and labor market service programs) can vary significantly across countries with similar levels of social welfare spending. More importantly, the aggregated measure of government social spending obscures the associated distributional implications and consequences. Countries with equal amounts of welfare state spending might distribute those resources unevenly to various social groups or across different social welfare programs. I attempt to address this gap in the literature by disaggregating government social spending and other

relevant data along three key dimensions—generosity, coverage and stratification. Generosity, defined as the average level of benefits that beneficiaries receive, captures the depth of social welfare provisions. Coverage, defined as the proportion of people in the total population who receive benefits, represents the breadth of social welfare provisions. Stratification, defined as the difference in levels of benefits that different beneficiaries receive, describes the inequality of social welfare provisions. Using this multidimensional conceptualization of social welfare policy, I explore and explain the differences and commonalities of social welfare provisions across Asian countries.

Most explanatory accounts of comparative social welfare focus on democracy and/or globalization as a key factor explaining variation in welfare provisions.² Theoretical debates persist, however, regarding whether democracy leads to a larger welfare state and whether globalization (or economic openness) reduces social protection. The empirical evidence to this

point has been mixed. The lesson from those inconclusive results is that, to better understand the influence of globalization on social welfare or the characteristics in social welfare that distinguish democracies from non-democracies, we must disaggregate the measure for government social spending. Using the multidimensional measure of social protection in 37 Asian countries from 2005-2010, I find that democracy is not necessarily associated with broader or more generous social welfare provisions; instead, democracy mitigates the inequality of social welfare provisions, indicated by significantly lower levels of social welfare stratification in democracies compared to non-democracies. I also find that economic openness is associated with broader coverage of social protection, yet it also decreases the generosity of social protection. The findings contribute to a more accurate and nuanced understanding of the relationships between democracy, globalization and social protection in Asia.

The paper unfolds as follows. Section 2 first reviews the measures of social welfare commonly used in existing studies and proposes a multidimensional conceptualization of social welfare policy. Then it presents the commonalities and differences in social protection across Asian countries using the multidimensional measure of social welfare. Section 3 investigates the main existing explanations for cross-national variation in social welfare and elucidates how the multidimensional conceptualization of social welfare contributes to a clearer understanding of the relationships between democracy, globalization and social protection in Asia. Section 4 presents the empirical test and discusses the results of quantitative analysis and limitations of the study. Section 5 concludes with a summary of the main findings and implications.

2. Social Protection in Asia

The study of comparative social welfare often starts with government social spending, with data analysis relying primarily on central government expenditures for social security and welfare programs. A rich analytical debate persists regarding whether government social
spending should be constructed as a share of GDP, a share of total government spending or on a per capita (dollar) basis. Each measure has advantages as well as drawbacks. Most studies use social spending as a share of GDP, thus capturing the overall allocation of societal resources. This measure, however, is strongly affected by the size of government and arguably does not capture how governments allocate the resources directly under their control. Social spending as a share of total government spending seems to provide a more direct measure of government priorities and has the additional benefit of increasing the variance across countries. But in contrast, welfare dollars per capita better capture the value of the resources potentially available to recipients.

No matter which measure is used, Asian countries in general spend relatively less on social welfare, such as pensions, than do other countries. Among 37 Asian countries, only four—Japan, South Korea, Mongolia and Uzbekistan—spend more than 5% of GDP per capita on social welfare. However, Asian countries, especially in the northeast and southeast of Asia, spend noticeably more on human-capital-related welfare programs, such as education (Table 1). Thus, some scholars characterize the Asian welfare state as a “human capital welfare capitalism model”; some categorize it as a “productivist welfare regime”; and others label it a “human

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capital-based social spending regime”\(^5\). By contrast, Latin American welfare systems that spend relatively more on pensions and social security are typically referred to as “protective welfare regimes” or “insurance-based social regimes” in the comparative political economy literature. \(^6\)

**[INSERT TABLE 1 HERE]**

The typology of welfare regimes can be traced back to Gosta Esping-Andersen’s work on the welfare state. Esping-Andersen’s famous “three worlds of welfare capitalism” comprise liberal, corporatist/conservative, and universal/social democratic welfare regimes. The corporatist/conservative welfare regime is characterized by a state-led and occupational-based social insurance system, which includes a “state edifice perfectly ready to displace the market as a provider of welfare,” and maintains an “emphasis on upholding status differences”. \(^7\) Thus, this system differs fundamentally from the tax-based and universal social democratic welfare state. In contrast to those two, the liberal welfare regime is a “residual” welfare state that relies on the private sector for welfare provision, combined with a number of state-led means-tested social assistance or transfer programs for the poor. Similar to the corporatist/conservative welfare state in continental European countries, social insurance is the predominant form of social protection

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in Asia, particularly in the East and Southeast Asia (Figure 1). Central and West Asian countries tend to maintain somewhat greater balance between social insurance and social assistance, though social insurance is still the dominant feature.

[INSERT Fig.1 HERE]

Figures on government social spending, whether measured as a share of GDP, a share of government expenditure or in per capita dollars, do not reveal much about the policy choice and design of welfare programs, or about the associated distributional implications and consequences. As Esping-Andersen points out, the key to understanding variation in social welfare is not simply how much money a state spends, but what the programs that states initiate actually do.\(^8\) Hence, a multidimensional measure of social welfare can provide important advantages in terms of capturing the nuances of policy design and distributional consequences. In existing studies of comparative social welfare, only a few notable attempts have been made to develop and adopt a multidimensional conceptualization of social welfare. Esping-Anderson characterizes the welfare state in the OECD countries around T.H.Marshall’s (1950) proposition of “social citizenship”\(^9\) and categorizes welfare regimes based on two indicators: de-commodification (eligibility rules or restrictions on entitlements; income replacement; the range or level of benefits provided) and stratification (the degree of segmentation, fragmentation and inequality of social welfare programs). That categorization of welfare regimes, while inducing

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much debate, has helped scholars of comparative social welfare to compare and dissect the varieties of contemporary welfare capitalisms. In a large-N study of social protection around the world, Mares computes an index of social policy protection for more than 100 countries using two new indicators: the scope of social insurance coverage and the degree of redistribution of social policy. Replacing the level of social welfare expenditures with this disaggregated measure of social protection, her work better uncovers the political mechanisms and conditions by which economic openness leads to different provisions of social protection, namely, in terms of the scope of benefits coverage and the allocation of costs across different occupations.

Building on this scholarship, I develop and propose a conceptualization of social welfare based on three dimensions: coverage, generosity and stratification. Generosity, similar to the concept of social welfare expenditures on a per capita basis that is commonly used in existing studies, captures the depth of welfare provision or the average level of benefits that beneficiaries receive. Coverage, defined as the proportion of people in the total population who receive benefits, represents the breadth of social welfare provisions. While both generosity and coverage pertain to the absolute gains that beneficiaries enjoy from social protection, stratification describes the relative gains or the inequality of benefits that different beneficiaries receive. These three dimensions are correlated in different ways depending on specific conditions. For example, when the total amount of welfare benefits available for allocation is fixed, broader coverage may lead to lower generosity, and vice versa. As another example, low coverage and high generosity might suggest high stratification of social welfare within the population. Below, I demonstrate

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how this multidimensional conceptualization of social welfare helps in comparing and characterizing the variation of social welfare in Asia.

To empirically examine the social protection and its multiple dimensions in Asian countries, I take advantage of the Social Protection Index (SPI) data collected and computed by the Asian Development Bank (ADB)\(^\text{11}\). SPI is computed as the expenditures-to-beneficiaries ratio of respective welfare programs including social insurance, social assistance and labor market programs,\(^\text{12}\) compared to poverty-line expenditures, normalized by one-quarter of GDP per capita.\(^\text{13}\) In its simplest form, the SPI of each country can be expressed as:

\[
\left( \frac{\text{Total Social Protection Expenditures}}{\text{Total Intended Beneficiaries}} \right) \times 0.25 \times \text{GDP per capita}
\]

Asian countries offer a widely varying degree of social protection, in terms of social welfare expenditure per capita as a percentage of GDP per capita: the figure ranges from 10.5\% for Japan


\(^{13}\) The average poverty-line expenditure across the SPI sample of 35 Asian countries approximates one-quarter of GDP per capita. Hence, each country’s poverty-line is set at one-quarter of GDP per capita for purposes of consistency. Thus, the SPI is essentially a relative indicator—its value is relative to the average income per capital in a country. For more detail, see Asian Development Bank, *The Social Protection Index: Assessing Results for Asia and the Pacific* (Asian Development Bank, 2013), pp. 7-9.
to 0.125% for Papua New Guinea. As Figure 2 shows, East Asia, including Japan, Korea, Mongolia and China, has excelled, with the average social welfare benefit standing at 6% of GDP. Central and West Asia, comprising transition economies such as Uzbekistan, Tajikistan, the Kyrgyz Republic and Azerbaijan, have also done relatively well, with an average social welfare benefit of 3.93% of GDP. Social welfare spending in Southeast Asia, including Singapore, Indonesia, Malaysia, the Philippines and Thailand, is below average, at 2.38% of GDP. Social protection in the Pacific Islands and South Asia is the lowest in Asia, about 2% of GDP.

[INSERT Fig.2 HERE]

The dimensions of generosity and coverage of social protection can be operationalized by a simple disaggregation of the SPI. Namely, Total Expenditures/Total Intended Beneficiaries can be expressed as two multiplicative parts:

\[
SPI = SPI_d \times SPI_b = \frac{\text{Total Expenditure}}{\text{Total Actual Beneficiaries}} \times \frac{\text{Total Actual Beneficiaries}}{0.25 \times \text{GDP per capita} \times \text{Total Intended Beneficiaries}}
\]

In other words, the first term registers the average size of benefits actually received (i.e. generosity, \(SPI_d\)),\(^{14}\) and the second, the proportion of intended beneficiaries actually covered (i.e. coverage, \(SPI_b\)). Similarly, the SPI can be disaggregated into two subcomponents: SPI for the poor (\(SPI_p\)) and SPI for the non-poor (\(SPI_{np}\)).\(^{15}\) \(SPI_p\) is defined as the sum of social welfare

\(^{14}\)Since this part (generosity or depth of social protection) is in monetary term (in national currencies), it is divided by poverty-line expenditure (or, one-quarter of GDP per capita) to facilitate cross-national comparison.

\(^{15}\)Some of the expenditures on the poor/non-poor are calculated based on professionally informed estimates or SPI country reports.
expenditure on the poor divided by all the poor, weighted by the ratio of all the poor to all potential beneficiaries of social protection.\textsuperscript{16} SPI\textsubscript{np} is defined as the sum of social welfare expenditure on the non-poor multiplier by the weight of the ratio of all non-poor potential beneficiaries divided by all potential beneficiaries of social protection. Since each of the two subcomponents has a population weight, they can be added to produce the overall SPI:

\[
SPI = SPI_p + SPI_{np}
\]

\[
= \left[ \frac{\sum \text{Expenditure}_p}{\sum \text{Potential Poor Beneficiaries}} \times \frac{\sum \text{Potential Poor Beneficiaries}}{\sum \text{Potential Beneficiaries}} \right] \]

\[
+ \left[ \frac{\sum \text{Expenditure}_{np}}{\sum \text{Potential NonPoor Beneficiaries}} \times \frac{\sum \text{Potential NonPoor Beneficiaries}}{\sum \text{Potential Beneficiaries}} \right]
\]

We can use the ratio of SPI\textsubscript{np} to SPI\textsubscript{p} as the measure of inequality or stratification of social benefits that the non-poor and the poor receive.

Disaggregating the social protection (including social insurance, social assistance and labor market service programs) along the three dimensions of generosity, coverage and stratification allows us to better explore the distributional aspects of social protection in Asia. Figures 3 and 4 jointly illustrate that the generosity of social protection, namely, average benefits per recipient, is largest in the Pacific Islands (22.5\% of GDP per capita) and South Asian countries (7.1\% of GDP per capita); however, only about 20\% of the population receives benefits in South Asia and

\textsuperscript{16} The SPI project used national poverty lines in determining the size of the poor population in each country—not international poverty lines such as the $1.25 per person per day (in purchasing power parity terms).
only about 12% do in the Pacific Islands. This suggests that the majority of social benefits in these regions go to a small portion of the population. In contrast, East Asia has lower generosity of social protection but the highest coverage of such programs in Asia—over 83% of the population receives some benefits, in the context of the highest overall spending on social protection in the region (about 6% of GDP per capita).

[INSERT Fig.3 & Fig.4 HERE]

Figure 5 demonstrates the variation of stratification of social protection across different regions in Asia. The stratification of social protection is significantly higher in South Asia and the Pacific Islands than in East and Southeast Asia. In 10 of the 37 Asian countries, the poor receive fewer relative benefits, measured as a percentage of poverty-line expenditures of the respective country, than the non-poor. In Pakistan, for instance, the poor receive 3.3% of poverty line expenditures (about .83% of GDP per capita), while the non-poor receive 5.1% (about 1.28% of GDP per capita). A similar pattern is apparent in several Pacific Island countries, such as the Marshall Islands, Palau, and the Solomon Islands.

[INSERT Fig.5 HERE]

In summary, Asian countries spend less on social protection compared to their counterparts in other regions with similar levels of income. In terms of welfare programs, social insurance dominates social protection across Asia and the Pacific. A multidimensional conceptualization of social protection is useful for comparing and characterizing the variation of social welfare among Asian countries. Descriptive data using the Social Protection Index constructed by ADB demonstrates that, as expected, East Asian countries including the high-income countries like Japan and South Korea, and middle-income countries such as China and Mongolia, spend relatively more on social protection than do countries in other regions of Asia. However, Central
and West Asia, comprised of no high-income countries and a number of transition economies, exhibit above-average spending on social protection. Southeast Asia, conversely, which includes one important high-income country (Singapore) and several large middle-income countries (Indonesia, Malaysia, the Philippines, and Thailand) exhibits well below-average spending on social welfare. South Asian countries offer the lowest social protection in Asia. Pacific Island countries do not perform well in social protection, either, but with the third highest average GDP per capita among regions in Asia, its social protection is at least higher than the average social protection in South Asia. Why is social welfare development so uneven across Asia? Can existing studies on comparative social welfare explain the cross-national variation in Asian social welfare? How might the multidimensional conceptualization and measure of social welfare help to explain the variation? The next section turns to these questions.

3. **Democracy, Globalization and Social Welfare**

A rich body of literature has explored the causes of social welfare variation across nations. The two important trends emerging in the 1980s in world politics and economics — democratization and globalization — have attracted much attention from scholars interested in studying their impact on social welfare development. In this section, I briefly overview the main arguments of these two lines of literature and elucidate how the multidimensional conceptualization of social welfare can address some of the debates in existing studies of comparative social welfare.

3.1 Democracy and Welfare State
The welfare state is typically considered to be a more robust feature of democracies than of non-democratic states. According to the received wisdom, democracies are better suited to providing social welfare benefits because of two democratic mechanisms. First is electoral competition. Democratic leaders have to win a large portion of the popular vote in order to win elections, so they have a stronger interest in providing social policy and other public goods in order to garner broad support. Second is political participation. Democracies permit political parties and interest group organizations to increase social pressure, allowing public demand for social policy to drive government spending and policy decisions. A paradox in the literature, however, is that the welfare state has frequently emerged in non-democratic settings, where politicians have fewer incentives to heed popular demand. Esping-Anderson calls it a “historical oddity” that “the first major welfare state initiatives occurred prior to democracy and were

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powerfully motivated to arrest its realization”. Other scholars have found significant variation in public goods provision among both democracies and non-democracies. Those mixed empirical findings are typically attributed to differences in measurement or in the definitions of regime type used in empirical analyses, or to publication bias regarding statistical significance or the size of effects in quantitative studies. A more basic question, however, remains unaddressed in most of the discussion to date regarding democracy and social welfare: what aspect of social welfare provision differs across democracies and non-democracies? I argue that

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the distinction lies more in the distributional aspect of social welfare provisions than in the aggregated level of welfare benefits across regime types.

Without the democratic mechanisms, social welfare provision in autocracies is attributed to the political leaders’ motivation to maintain regime survival and stability. In the important book *Political Economy of Dictatorship*, Ronald Wintrobe argues that dictators provide public goods mainly for two purposes: 1) to increase the loyalty of the population, and 2) to promote general economic growth on which the dictator’s budget depends.\(^{22}\) Other scholars of the political economy of dictatorship suggest that autocratic rulers use social welfare privileges to buy the support of winning coalitions, in order to ensure that they stand on the side of the regime against social opposition forces.\(^{23}\) Accordingly, autocratic leaders provide generous benefits to certain privileged groups, such as the military and police forces and the bureaucratic or administrative class, in order to maintain the loyalty of these groups that is necessary for political rule. More importantly, autocratic leaders might also adopt expansive social legislation and progressive social welfare to preempt unrest, riots and revolution by the poor. In other words, as threats to regime survival or stability can come from both elites and the masses, autocratic leaders attempt to strike a balance in benefits between them; choosing to distribute benefits and goods only to


elites or only to the masses does not constitute an optimal strategy for maximizing the prospects of regime stability. Thus, leaders in non-democracies must balance strategically between elites and other social groups in the provision of social welfare benefits.

An implication that derives from the above argument, and a key feature of autocratic social welfare provision that has been implied but not clearly pronounced in the literature, is that the inequality or stratification of social welfare provisions is more prominent in non-democracies and is commensurate with the leaders’ political strategy for regime survival. As Esping-Andersen pointedly remarks, “Social welfare is not just a mechanism that intervenes in, and possibly corrects, the structure of inequality; it is, in its own right, a system of stratification. It is an active force in the ordering of social relations”.  

Although scholars have noted that the conservative and the liberal welfare states in affluent democracies have also embedded certain patterns of stratification or inequality in their social welfare systems (i.e. in terms of the labor market insiders-outsiders cleavage in the conservative welfare state and the income inequality in the liberal welfare state), the stratification of social welfare is more salient and preserved out of political consideration in autocracies. Hence, I propose to disaggregate the level of government social spending along multiple dimensions including stratification, generosity and coverage in both theory building and empirical analysis, as doing so allows not only for an analysis of the relationship between democracy and social welfare but also for an evaluation of the nuanced differences of social welfare distribution between democracies and non-democracies.

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In summary, although conventional wisdom suggests that democracies have an “inherent”
advantage in social welfare provisions, the empirical evidence regarding the relationship between
democracy and social welfare (spending as well as policy outcomes) is mixed at best. The
confusion is attributed to ambiguity in both the theory and the empirical operationalization of
democracy (the independent variable), social welfare (the dependent variable) and the causal
links connecting them. For improvement, I suggest disaggregating social welfare spending along
the three dimensions noted earlier—coverage, generosity and stratification. I predict that the
difference in social welfare between democracies and non-democracies is more pronounced on
the dimension of stratification (or inequality of benefits across groups).

3.2 Globalization and Social Protection

During the past quarter century, globalization penetrated most regions of the world, including
Asia. Many scholars view globalization, specifically economic openness, as a great source of
momentum for increasing social welfare.25 These scholars argue that expanding resources are
typically devoted to the public sector, including welfare programs, purportedly for the purpose of
protecting citizens from the adverse effects of economic openness, such as increasing economic
uncertainty, labor dislocation, poverty and inequality. The positive relationship between
economic openness and the size of public sectors is not limited to advanced industrialized

25 David Cameron, "The Expansion of the Public Economy: A Comparative Analysis," American
Political Science Review 72: 4 (1978), pp. 1243-61; Geoffrey Garrett, "Globalization and
Government Spending around the World," Studies in Comparative International Development
economies but is robust in a broader sample comprising more than 100 countries. Most existing studies of globalization and social protection rely on the aggregated measure of total government expenditure, consumption or social spending. Nonetheless, the distribution of government expenditure is as important as the level of spending, despite remaining less frequently studied. Countries with equal amounts of welfare state spending might distribute the spending unevenly to various social groups or across social welfare programs. As Section 2 above describes, the Pacific Island and South Asian countries seem to target very high levels of expenditure to narrow subgroups of the population, whereas East Asian countries distribute the benefits of their social welfare programs relatively broadly across the entire population. Similarly, the mix of various social programs can also vary significantly across countries with similar levels of social welfare spending. Important information about the distribution of social welfare benefits is simply discarded if aggregated expenditure data are used.

More importantly, the disaggregated measure of social welfare can assist in teasing out the real relationship between economic openness and social protection. Different arguments persist in the literature regarding the correlation between economic openness and the size of the welfare state. One line of literature argues that in the era of globalization, public demands for social protection increase, which governments respond to by enlarging the safety net and government expenditure.


expenditure. Another line of study points to the “race to the bottom” in wages, social protection and labor market regulations. The idea in that literature is that with globalization, especially financial market liberalization, capital has new opportunities for relocation to low-cost and low-regulation countries, so governments may cut social welfare expenditures and regulations in order to attract more investment. I contend that these two views of globalization are complementary rather than contradictory, and that their predictions actually address the different dimensions of social protection. Based on the first mechanism, economic openness is predicted to be positively associated with the coverage of social protection; according to the second mechanism, it should be negatively associated with the generosity of social protection. I test these predictions in the empirical analysis in the next section.

To summarize Section 3, the remarkable trends of democratization and globalization have paralleled changes in the welfare state in the post-war period. Much scholarship has been devoted to studying the relationships between democracy, globalization and social protection,

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and the mechanisms that link them. Nevertheless, theoretical and analytical improvements can be made by replacing the aggregated measure of government welfare spending that characterizes existing studies with the multidimensional conceptualization of social welfare proposed in this study. The multidimensional conceptualization of social protection captures different mechanisms by which democracy and globalization, directly or indirectly, change the scope, magnitude and distribution of social protection. Specifically, I argue that social welfare in democracies differs from its counterpart in non-democracies primarily on the dimension of stratification; globalization especially economic openness induces social welfare expansion in coverage but retrenchment in generosity. The following hypotheses are formulated based on these arguments. The next section presents the empirical tests and results.

Hypothesis 1: social welfare in non-democracies has a higher degree of stratification than does social welfare in democracies.

Hypothesis 2: economic openness is positively associated with the coverage of social protection.

Hypothesis 3: economic openness is negatively associated with the generosity of social protection.

4. Empirical Analysis

4.1 Data, Measurement and Model Specification

To test the above hypotheses, I constructed a dataset for 37 Asian countries from 2005 to 2010. I use the Social Protection Index (SPI) data collected and computed by the ADB for the dependent variables. Following the theoretical analysis, social protection is conceptualized on three dimensions—coverage, generosity and stratification. The depth and the breadth of SPI, $SPI_d$ and $SPI_b$, are used as dependent variables that represent generosity and coverage of social welfare respectively. The degree of stratification/inequality of social protection is measured by
the ratio of the benefits that the non-poor (SPI_{np}) and the poor ((SPI_p) receive relative to the poverty line.

The key independent variables are two: democracy and economic openness. I use the variables measuring competitiveness of executive recruitment (xrcomp) and competitiveness of participation (parcomp) in the Polity IV Dataset (Marshall et al 2013)\(^{30}\) as proxies of the two democratic mechanisms that are hypotheses to influence the stratification of social protection.\(^{31}\) Higher scores in these variables indicate more competitiveness in executive recruitment and political participation.\(^{32}\) The measures of economic openness are the standard measure of exports


\(^{31}\) The definitions of these two variables can be found in Marshall et al. 2013. “Polity IV Project Dataset Users’ Manual”, pg. 21-23, 26-28.

\(^{32}\) Values of variable “xrcomp” ranges from 0 to 3, “0” means “non-applicable” (changes in chief executive occur through forceful seizures of power); “1” indicating “chief executives are determined by hereditary succession, designation, or by a combination of both”, “2” indicating “dual executives in which one is chosen by hereditary succession, the other by competitive election; also used for transitional arrangements between selection and competitive election”, “3” indicating chief executives are typically chosen in or through competitive elections matching two or more parties or candidates”. Values of variable “parcomp” ranges from 0 to 5, “0” indicating “non-applicable” (political participation is unregulated); “1” indicating “no significant oppositional activity is permitted outside the ranks of the regime and ruling party”, “5”
plus imports as a share of GDP; and foreign direct investment (FDI) as a share of GDP. The trade data are collected from ADB’s Statistical Database System Online (SDBS) and the FDI data are from World Bank.

In addition to the variables used to test theoretical predictions, I have added a range of control variables that might affect variation in social welfare across countries: the logarithmic value of GDP per capita (\(GDP_{pc}\)) as a control for the level of economic development; the annual growth rate of GDP (\(GDP\) growth) to manage the effect of economic volatility on social protection; dependency ratio of population (age < 15 or > 65 in total population, “dependency”) as a control for social needs, and total government expenditure as a share of GDP (\(govexp\)) to control for the size of government. A time-specific dummy variable, \(crisis\), is included to take into account the effect of 2008 global financial crisis on social protection. I also construct country dummy variables, a standard procedure in econometric analysis to control for the specific effects of each particular country. The descriptive statistics of all variables are presented in Table 2.

**[INSERT TABLE 2 HERE]**

I test the hypotheses with cross-section-time-series model. For cross-section time-series data, the major concern is the contemporaneous correlation and heteroskedasticity in the error indicating “there are relatively stable and enduring, secular political groups which regularly compete for political influence at the national level; ruling groups and coalitions regularly; ruling groups and coalitions regularly, voluntarily transfer central power to competing groups.”
structure, which is normally corrected using panel-corrected standard errors (PCSEs). All independent variables are lagged by one year to control for the potential exogenous effects of the dependent variables. Based on the theoretical analysis, I expect to see a negative correlation between democratic mechanisms (xrcmp, parcomp) and the level of stratification of social protection (spi_s); a positive correlation between economic openness (trade, FDI) and the coverage of social welfare (spi_b) but a negative correlation between economic openness and the generosity of social welfare (spi_d).

4.2 Empirical Analysis Results

The results of the empirical analysis are summarized in Table 3. Overall, the statistical results lend substantial support to the theoretical predictions. First, democracy, specifically the democratic mechanisms of election and political participation, are associated with a lower level of stratification of social welfare provision, and this relationship is significant at conventional levels. Second, economic openness measured by international trade and FDI is, as expected, negatively associated with the generosity of social protection but positively related to the coverage of social protection. The results on economic openness are consistent and highly significant in most model specifications. These findings provide a more accurate understanding of the relationship between economic openness and social protection, which is often a subject of debate in the international political economy literature.

In terms of magnitude, the results about democracy and social protection stratification show that (Model 1 and 3 for DV1 in Table 3), controlling for relevant socioeconomic factors, a one-

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point increase in the competitiveness of executive recruitment \((xrcomp)\) will significantly decrease the stratification of social protection (i.e. the ratio of social protection received by the non-poor and the poor) by 2.6 points, about one third of the standard deviation of social protection stratification score in the sample. A one-point increase in the competitiveness of political participation \((parcomp)\) has a similar impact on the stratification of social protection. With respect to the results about democracy and other dimensions of social protection, the competitiveness of executive recruitment \((xrcomp)\) has no significant impact on generosity or coverage of social protection; however, the competitiveness of political participation \((parcomp)\) demonstrates a significant yet negative association with the generosity of social welfare. This finding deserves more future research.

Turning to the results about economic openness and social protection (Model 2 to 4 for DV 2 and 3 respectively in Table 3), they tell us that other things being equal, a one-percent increase in international trade (as a share of GDP) will increase the coverage of social protection by .50 percent of the eligible population and decrease the generosity of social protection by about .13 percent of GDP per capita. Likewise, a one-percent increase in FDI net flow (as a share of GDP) will increase the coverage of social protection by 1.4 percent of the eligible population and decrease the generosity of social protection by .18 percent of GDP per capita. This finding reconciles the debate in the literature as to whether or not globalization leads to a “race to the bottom” in social welfare. In fact, each side of the debate is corroborated to some extent in this analysis. The uncertainty or economic risk associated with exposure to international markets and competition for investment does induce the government to provide social protection to more people; however, the total amount of resources that governments eventually allocate to social
protection, or the average level of benefits that people receive through social protection, has not increased proportionally, likely owing to the pressure to control labor cost increases.

Focusing on results of the control variables, dependency rate has substantial impact on multiple dimensions of social protection: increase in the dependent population (children or elders) will significantly increase the stratification of social protection, meanwhile it will significantly decrease the generosity of social protection; in addition, increase of the dependent population might increase the coverage of social protection for eligible population. As for the other control variables, fluctuation of GDP growth (measured by annual GDP growth rate) and the size of government (measured by government expenditure as a share of GDP) seem to increase the stratification of social protection but decrease the generosity and coverage thereof, though these results fail to reach the conventional levels of statistical significance in most model specifications. Level of economic development (measured by GDP per capita) and the 2008 global financial crisis do not have consistent and noteworthy effects on social protection in Asia.

4.3 Limitation of the Empirical Study

A limitation to this study is that the ADB’s SPI data, from which the three dependent variables are derived, has considerable amount of missing data. To remedy it, I attempted to construct the dependent variables using other data source such as the World Bank’s Atlas of Social Protection: Indicators of Resilience and Equity (ASPIRE). The ASPIRE data is

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34 The ASPIRE include ten indictors of social protection. Among them, the indicators of “average per capita transfer”, “coverage”, and “benefit incidence” are similar to the concepts of “generosity”, “coverage” and “stratification” developed in this study. For more details on the
compiled from various individual/household survey data and is intended to cover most countries in the world since 2005. However, its variable computation is less transparent and its data at this stage are even more unbalanced (available country-year cases < 70) compared to the ADB’s SPI dataset. Hence, better and more complete data are badly needed in future research in order to untangle the multiple dimensions of policy design and the distributional consequences of social protection.

5. Conclusion

This paper aims to develop a multidimensional conceptualization of social welfare benefits for comparative social welfare study. The paper demonstrates that the multidimensional conceptualization of social welfare is feasible for a comparative study of social welfare in Asia, and that it allows for a more accurate understanding of the relationships between democracy, globalization and social protection, which are often a subject of debate in the literature of comparative and international political economy. Using data from 37 Asian countries from 2005 to 2010, this study shows that democracy is not necessarily associated with broader or more generous social welfare provisions; instead, democratic mechanisms such as election and political participation mitigate the inequality in social welfare provisions, indicated by significantly lower levels of stratification of social protection in democracies compared to non-democracies. The evidence also indicates that globalization is associated with broader coverage of social protection in Asia, a result in keeping with findings from OECD countries and the small open states. However, the proponents of the “race to the bottom” argument that globalization disincentivizes social welfare spending due to competition for investments also gain support in indicators computed in ASPIRE, see http://datatopics.worldbank.org/aspire/ [accessed April 16, 2014].
the sense that the generosity of social protection decreases with economic openness. It is important to note that these nuanced findings, and the novel understanding of democracy, globalization and social protection that this study implies, are based on data from 37 Asian countries between 2005 and 2010.

This study has two main implications for the study of comparative social welfare. The first concerns the multidimensional conceptualization and measure of social welfare. Most existing studies of social welfare, with only a few important exceptions, use aggregated levels of government social spending to measure the social welfare provision of a country and compare it cross-nationally. Such a measure of social welfare, though easily amenable to large-N quantitative and comparative analyses, overlooks important information about the distributional aspects of social welfare policy. As a result, some theoretically-sound propositions find insufficient or inconclusive support in empirical analyses that use aggregated levels of social welfare spending as the dependent variable. Examples can be found in some existing studies examining the relationship between democracy and the welfare state, or the relationship between globalization and social protection. To resolve this problem, some scholars have disaggregated social welfare spending by policy areas such as pensions, health and education; other scholars have replaced social welfare spending with social policy results such as the numbers of public

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schools, public sanitation, roads, and access to safe water\textsuperscript{36} or the primary pupil-teacher ratio, immunization rates and infant mortality rates.\textsuperscript{37} The solution that this study proposes is to conceptualize and disaggregate the level of social welfare spending according to three different policy dimensions: coverage, generosity and stratification. Unlike measurements based on social policy results, the multidimensional measure of social welfare does not require extra data collection; furthermore, compared to the disaggregated measure of social welfare by policy area, the multidimensional measure better captures the distributional aspects of social welfare.

The second implication of this study concerns the remarkable variation and characters of social protection in Asia. As delineated in Section 2, various sub-regions of Asia and the Pacific have approached social protection in notably different ways. Moreover, the different development paths, as well as the diverse socioeconomic conditions across these sub-regions, put into distinct priorities and perceived challenges that Asian countries face in their ongoing social welfare reform efforts. One can notice differences while moving across this vast continent. In South Asia, Southeast Asia, and the Pacific, most social protection programs have focused on expanding coverage and identifying financing sources to fight poverty, reduce vulnerability, and provide long-term protection to the population. In transition economies in Central Asia, the focus has been more on modifying generous Soviet-era systems to ensure their sustainability in a market economy. Furthermore, in a few developed countries in Asia such as Japan, South Korea


and Singapore, and some middle-income countries such as China, aging populations have raised significant concerns regarding workforce productivity and the sustainability of social welfare systems.

According to Peter Lindert, who systematically evaluates government social spending tracing back to the 18th century, population aging, GDP per capita, and democracy are the three most powerful predictors of social spending (as a percentage of GDP) around the world, and the prediction is that all three factors are leading to social spending increases. In contrast, this study, using data only from Asian countries during 2005-2010, indicates that democracy has not brought about increase of generosity or coverage of social welfare in Asian countries; moreover, increasing dependency ratio actually decreases the generosity of social welfare that Asians receive from their governments and increases the stratification (or inequality) of social welfare; controlling for democracy and dependency, GDP per capita does not have systematic and significant impact on the Asian social protection. These findings raise two lines of inquiries for future research: first, how the process of democratization and the feature of democracy in Asia have specifically shaped the institutional design and practice of its social protection; the second is about the existence and persistence of an “Asian Welfare Model” that espouses reliance on

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the family or other forms of private support, rather than on government, for welfare needs. Thus, an important extension of this study will be country- or region-specific study of social welfare policy in Asia using the multidimensional conceptualization of social protection, in order to establish the mechanisms underlying the statistical findings here.
Tables & Figures:


<table>
<thead>
<tr>
<th>Country</th>
<th>Govt. spending/ GDP</th>
<th>Social security spending/ GDP</th>
<th>Social security spending/ Total spending</th>
<th>Health spending/ GDP</th>
<th>Health spending/ Total spending</th>
<th>Education spending/ GDP</th>
<th>Education spending/ Total spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America average</td>
<td>22</td>
<td>4.9</td>
<td>23.2</td>
<td>1.35</td>
<td>6.2</td>
<td>3.2</td>
<td>15.2</td>
</tr>
<tr>
<td>East Asia average</td>
<td>21.1</td>
<td>0.5</td>
<td>2.7</td>
<td>0.7</td>
<td>4.2</td>
<td>3.2</td>
<td>17.5</td>
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<tr>
<td>Eastern Europe average</td>
<td>40.3</td>
<td>13.6</td>
<td>29.9</td>
<td>4.4</td>
<td>12.6</td>
<td>2.3</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Fig. 1 Components of Social Protection by Region, 2009

Note: The x-axis refers to the expenditures-to-beneficiaries ratio of respective welfare programs compared to poverty-line expenditures (normalized by one-quarter of GDP per capita). For example, if the figure of social insurance were 0.100 in region X, this number would indicate that the social insurance expenditures (per intended beneficiary) represent 10% of poverty-line expenditures, or 2.5% of GDP per capita of the region.

Fig. 2 Social Protection Index by Region, 2009

*Note:* The Social Protection Index (SPI) is an indicator that divides total expenditures on social protection by the total number of intended beneficiaries of all social protection programs. For assessment purposes, this ratio of expenditures to beneficiaries is compared with poverty-line expenditures. For purposes of consistency, each country’s poverty-line expenditures are set at one-quarter of its GDP per capita. For example, if the SPI were 0.100 in country X, the index would indicate that total social protection expenditures (per intended beneficiary) represent 10% of poverty-line expenditures, or 2.5% of GDP per capita.

Fig. 3 Depth of the Social Protection Index by Region and Program, 2009

Note: the depth of SPI refers to the average size of benefits received by actual beneficiaries compared to the poverty-line expenditure. For example, if the depth were 0.200, this would signify that the average size of benefits is 20% of poverty-line expenditures, or 5% of GPD per capita.

Fig. 4 Breadth of the Social Protection Index by Region and Program, 2009

Note: the breadth of SPI refers to the proportion of intended beneficiaries who actually receive benefits. The breadth would be 0.500, meaning that half of all intended beneficiaries receive benefits.

Fig. 5 Stratification of Social Protection by Region, 2009

*Note:* stratification of social protection is measured by the ratio of benefits that the poor and the non-poor receive, respectively, relative to the poverty line expenditure (set as one-quarter of GDP per capita).

## Table 2. Summary of Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<td>spi_d</td>
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<td>.473</td>
<td>.574</td>
<td>.032</td>
<td>4.529</td>
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<td>spi_b</td>
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<td>.365</td>
<td>.324</td>
<td>.001</td>
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<td>spi_s</td>
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<td>6.280</td>
<td>9.106</td>
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<td>xrcamp</td>
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<td>1.879</td>
<td>.981</td>
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<td>parcomp</td>
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<td>1.487</td>
<td>0</td>
<td>5</td>
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<tr>
<td>trade</td>
<td>176</td>
<td>93.021</td>
<td>39.969</td>
<td>24.5</td>
<td>210.4</td>
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<tr>
<td>FDI</td>
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<td>36.758</td>
<td>0</td>
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<td>10.082</td>
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<td>95.6</td>
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<tr>
<td>GDP pc</td>
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<td>1.628</td>
<td>6.386</td>
<td>13.883</td>
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<tr>
<td>govexp</td>
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<td>25.702</td>
<td>12.997</td>
<td>5.730</td>
<td>83.557</td>
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<tr>
<td>dependency</td>
<td>204</td>
<td>60.593</td>
<td>17.066</td>
<td>8</td>
<td>106</td>
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</table>

### Table 3. Determinants of Cross-National Variations in Social Protection in Asian Countries

<table>
<thead>
<tr>
<th></th>
<th>DV 1: Stratification</th>
<th>DV 2: Coverage</th>
<th>DV 3: Generosity</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
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<tr>
<td><strong>Xrcomp</strong></td>
<td>-2.586***</td>
<td>-2.611**</td>
<td>.016</td>
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<tr>
<td></td>
<td>(.892)</td>
<td>(1.131)</td>
<td>(.029)</td>
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<tr>
<td><strong>Parcomp</strong></td>
<td>-2.574*</td>
<td>-2.617*</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>(1.357)</td>
<td>(1.674)</td>
<td>(.021)</td>
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<tr>
<td><strong>Trade</strong></td>
<td>.010</td>
<td>-.013</td>
<td>.005***</td>
</tr>
<tr>
<td></td>
<td>(.031)</td>
<td>(.093)</td>
<td>(.001)</td>
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<tr>
<td><strong>FDI</strong></td>
<td>.116</td>
<td>.136</td>
<td>.014**</td>
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<tr>
<td></td>
<td>(.087)</td>
<td>(.093)</td>
<td>(.006)</td>
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<tr>
<td><strong>GDP growth</strong></td>
<td>.266*</td>
<td>.222</td>
<td>.318*</td>
</tr>
<tr>
<td></td>
<td>(.148)</td>
<td>(.145)</td>
<td>(.190)</td>
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<td><strong>GDP pc</strong></td>
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<td></td>
<td>(1.780)</td>
<td>(1.311)</td>
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<tr>
<td><strong>Govexp</strong></td>
<td>.711***</td>
<td>.557***</td>
<td>.770***</td>
</tr>
<tr>
<td></td>
<td>(.229)</td>
<td>(.088)</td>
<td>(.229)</td>
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<tr>
<td><strong>Dependency</strong></td>
<td>.393**</td>
<td>.253***</td>
<td>.458**</td>
</tr>
<tr>
<td></td>
<td>(.149)</td>
<td>(.083)</td>
<td>(.190)</td>
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<tr>
<td><strong>2008 crisis</strong></td>
<td>-1.492</td>
<td>-1.102</td>
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</tr>
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<td></td>
<td>(1.321)</td>
<td>(1.357)</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>(-15.713)</td>
<td>(-15.830)</td>
<td>(-12.772)</td>
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<td></td>
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<tr>
<td>R-squared</td>
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<td>.534</td>
<td>.572</td>
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<tr>
<td>N of countries</td>
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<tr>
<td>N of ob.</td>
<td>92</td>
<td>95</td>
<td>88</td>
</tr>
</tbody>
</table>

**Note:**

1. P-values are based on two-tailed tests: ***p < .01, **p < .05, * p < .10.
2. Panel-Corrected-Standard Errors (PCSE) are reported in parentheses.
3. Coefficients of country dummies are not reported.