RESEARCH NOTE



Trade openness, job sectors, and social policy preferences: evidence from China

Li Zheng^{1*} (D) and Ling Zhu²

¹School of Government, Yunnan University, Yunnan, China and ²Department of Political Science, University of Houston, Houston, USA

*Corresponding author. Email: lzheng4uh@gmail.com

(Received 6 October 2020; revised 4 October 2021; accepted 9 October 2021; first published online 21 March 2022)

Abstract

How does trade openness affect individuals' social policy preferences in emerging markets? Drawing upon the theories of economic openness, risk, and social policy preference, we examine how trade openness and job sectors jointly shape preferences on social protection in China, the largest emerging market. Using the World Value Survey (WVS) Wave VI and archival macroeconomic indicators in 2012, we find that trade openness is associated with higher demands for government responsibility in social protection. We also find, compared with public-sector employees, private-sector employees exhibit lower levels of support to the role of government in social protection. The public-private divide in policy preferences, nevertheless, diminishes in regions with high levels of trade openness. This research provides new evidence to the risk-model of social policy preferences in the Chinese context. It also highlights the importance of considering the significant differences between public and private-sector employees in their social policy preferences.

Keywords: Comparative political economy; international political economy; social policy

1. Introduction

The literature of globalization and social protections highlights the importance of identifying how economic gains and losses determine one's preferences on government-funded social protection (Scheve and Slaughter, 2004; Mayda and Rodrik, 2005; Walter, 2010, 2017). Other works find sociotropic and cultural factors play important roles in shaping individuals' policy preferences (Mansfield and Mutz, 2009; Naoi and Kume, 2011; Lü et al., 2012). Most of the existing studies, however, are drawn from the empirical context of western industrialized countries (Mares and Carnes, 2009). Recent studies in developing countries find that economic globalization has led governments to adopt different policy responses such as the expansion of subsidies or public employment (Wibbels and Ahlquist, 2011; Rickard, 2012; Nooruddin and Rudra, 2014). However, we still know much less about whether economic openness affects individuals' social policy preferences differently in emerging markets. Furthermore, many relevant studies primarily consider the total volume of trade and overlook how imports and exports may affect workers' labor market risks differently. It also remains unclear whether workers' occupational characteristics defined by the public-private cleavage will affect their preferences on social protection. In this paper, we fill these gaps in the literature by probing how trade openness and job sectors jointly affect individuals' preferences on social protection in China.

Drawing upon the "new new trade theory", we argue that trade openness raises workers' demand for social protection as more individuals share the heightened economic risks in local labor market. Also, imports and exports affect workers' labor market risks differently, then © The Author(s), 2022. Published by Cambridge University Press on behalf of the European Political Science Association.

translate into distinct demand on social programs. Our analysis suggests that greater imports increase workers' job volatility and income variability in emerging markets as found in advanced economies (Margalit, 2011; David et al., 2013; Owen and Johnston, 2017; Jensen et al., 2017). However, greater exports may increase demand on redistribution-related government responsibility but do not necessarily raise the demand on unemployment compensations.

Linking micro-level preference data from World Value Survey (WVS) Wave VI and macroeconomic indicators on trade openness at the sub-national (provincial) level in China, we find evidence that trade openness significantly increases demand on social protection. Although public-sector employees hold more supportive views than private-sector employees regarding the role of government in providing social protection, trade openness is more likely to affect private-sector employees' social policy preferences than public-sector employees. In Chinese provinces with high levels of trade openness, we observe convergence in social policy preferences between public and private-sector employees. Our research provides new evidence to the risk-model of social policy preferences as China embraces economic globalization and has become the largest emerging market. Showing the significant differences between public and private-sector employees in their social policy preferences, our research sheds lights on the economic foundations of heterogeneous social policy preferences in China.

2. Trade openness, economic risks, and social policy preferences

In this section, we discuss individual workers' social protection preferences in emerging markets by drawing distributional implications from the "new new trade theory" in the labor markets. We conceptualize individuals' labor market risks as two major dimensions: job security and income volatility. According to the "new new trade theory", trading firms are larger and more competitive than their domestic counterparts, because only more productive firms can afford the costs of international trade while less productive firms have to focus on the domestic market or exit (Melitz, 2003). Exporting firms that are more productive and larger, therefore tend to gain increasing profits from the economies of scale and technology-oriented innovation, which result in higher returns to their workers (Atkin et al., 2017). To the contrary, domestic firms and their workers face intensified competition from foreign companies (Kim and Osgood, 2019). Relevant trade studies find that trade is associated with rising inequality in developing countries and emerging markets (Goldberg and Pavcnik, 2007; Verhoogen, 2008).

New study based on the "new new trade theory" underscores that in regions that have a high-level of trade openness, domestic workers might share similar labor market risks due to job competition (Palmtag et al., 2020). As such, individuals are more likely to support the expansion of social protection when trade openness is high. Inspired by the non-material explanations of trade-relevant policies (Mansfield and Mutz, 2009; Lü et al., 2012), we acknowledge that individuals' feelings and preferences about the economic risks might also depend on how well the other people in their surroundings feel. The overall trade exposure in the community or local area has a crucial influence on how individuals perceive the economic risks. As trade openness increases, domestic workers in the same region share the heightened economic risks and therefore form the collective sentiment for higher social protections.

We further recognize different mechanisms by which exports and imports affect individuals' economic risk and demand on social protections. Export-intensive areas benefit workers within the exporting sectors, and the income gap between exporters and domestic firms will raise domestic workers' demand on distribution-related social programs. Then individuals who reside in export-intensive areas tend to demand a higher level of government-funded social protection while they are not sensitive to unemployment risks because the expansion of exports creates new jobs. Import-intensive areas, on the contrary, will provide fewer job opportunities to local workers (David et al., 2013). In a developed open economy, a high level of imports is often associated with the outsourcing of domestic jobs (Margalit, 2011; David et al., 2013; Owen and Johnston, 2017).

In emerging markets, labor market shocks from imports are also likely to produce demand on generous unemployment compensations and other social safety net programs, since one who had experienced labor market worries are also very likely to experience shocks of other social domains such as family, health, and wealth (Hacker et al., 2013; Zhu and Lipsmeyer, 2015).

H1a: Individuals who reside in places with a higher level of trade openness will be more likely to demand social protection than those living in places with a lower level of trade openness.

H1b: Individuals who reside in places with a higher level of export will be more likely to demand government responsibility in redistribution-related social protection than those living in places with a lower level of export.

H1c: Individuals who reside in places with a higher level of import will be more likely to demand unemployment protection than those living in places with a lower level of import.

Individuals' occupational characteristics, such as their job sectors, may color how trade openness shapes social policy preferences. We argue that private-sector employees have distinct social policy preferences in emerging markets. First, social protection program is a dual-system by design and uses different schemes for public and private-sector employees (Mares and Carnes, 2009). For example, the Chinese government utilizes its fiscal capacities to fund the public sectors while privatizing social programs for the private sectors (Huang, 2019). Second, as private-sector employees do not have access to publicly-funded social programs, they have to cope with their economic risks by relying on social insurance provided by their employers or out-of-pocket resources (Frazier, 2011, 2015; Chen and Hamori, 2013; Holland, 2018; Jiang et al., 2018). As such, private-sector employees are less likely to demand government-funded social protection than public-sector employees, because they do not directly benefit from these government-funded programs. However, trade openness amplifies the gap in economic risks between public employees and private employees. A high level of trade openness increases the economic risks of those who hold private-sector jobs, while public-sector employees are not affected by trade and receive generous publicly-funded social protections (Mares and Carnes, 2009; Nooruddin and Rudra, 2014). As the local economy is more exposed to international competition, individuals who work in private sectors are facing heightened economic risks. Therefore, we expect that the rising economic risks caused by trade openness will motivate private workers to desire greater social protection.

H2: Private-sector employees are less likely to demand social protection than public-sector employees.

H3: Private employees will be more likely to demand publicly funded social protection than their counterparts in public sectors when the level of trade openness is high.

3. Research design and data

China, as the largest merging market, offers an ideal case to examine the link between economic openness and preferences on social protection preferences. Chinese economic growth in recent years relied on economic openness, where private companies account for the majority of its exports (Naughton and Tsai., 2015). Also, a socialist welfare tradition raises the question of whether trade openness changes Chinese citizens' social policy preferences.

We draw data on Chinese workers' social policy preferences from the China Module of the WVS Wave 6. Using the GPS-assisted area sampling method (Landry and Shen, 2005), the survey produces a nationally representative sample of adults between the ages of 18 and 75, who reside in

Mainland China (Hong Kong and Macao are not included) in 2012. Forty counties were chosen as primary survey units by stratified PPS (Probabilities Proportional to Size) out of 2855 counties in China. The resulting data include respondents from 21 provinces and threedirect-administrated municipalities. We merge the individual-level survey data with archival macroeconomic indicators at the provincial level. Provincial-level data on foreign trade, foreign direct investment (FDI), service industry ratio, unemployment rate, and province-level Gross Domestic Product (GDP) are drawn from the National Bureau of Statistics of China (NBSC) and Chinese Provincial Statistical Yearbooks.

Two survey items from the WVS measure Chinese citizens' social protection preferences. The first dependent variable measures individuals' responses to the question: "Do you agree or disagree with the government, or people should take more responsibility to ensure that everyone is provided for living?" Responses are coded from 1 to 10, with "10" referring to a strongly supportive attitude toward the role of government in providing social protection, and "1" referring to the opinion that people should care for their basic needs for living. The second dependent variable also has a 1-10 ordinal scale, measuring whether the government should provide unemployment benefits to citizens. Higher values on this scale indicate the government should provide higher unemployment subsidies. We attribute individuals' preferences of social protection to economic vulnerability induced by trade openness and job sector. First, we use rade volume as the percent of GDP at province level in 2012 to measure the overall level of trade openness. Figure A2 in Appendix shows the geographic variation of trade openness across 24 provincial units in China. The mean of variable-trade openness is 34 percent, with a range from 3.8 to 144 percent. Because we conceptualize different effects of exports and imports, we provide exports over GDP and imports over GDP. The second independent variable is a dichotomous variable measuring survey respondents' job sectors based on whether one works in public or private sector, coding "1" for private-sector employees and "0" for employees in governmental and public sectors. In the Chinese economy, private firms dominate export-oriented sectors that produce manufacturing goods. While some SOEs involve in foreign trade, the majority of them concentrate on strategic sectors, such as banks and energy industries, and therefore are sheltered from external economic shocks.² Because we nest individual-level preference data within provincial-level economic indicators, we estimate several multi-level models for the two policy preference variables. Specifically, we use the generalized linear latent and mixed models (Rabe-Hesketh and Skrondal, 2012). For each of our empirical models, we recognize the two-level hierarchical data structure, and include random intercepts by provinces to deal with intra-class heterogeneity. We choose the multilevel-model approach over the method using clustered standard errors to more explicitly account for the hierarchical bias (Abadie et al., 2017).³

4. Empirical findings

Table A2 in the Appendix presents findings based on two multi-level regressions. Model 1 is for the dependent variable that measures attitudes regarding the role of government in supporting basic living standards. Model 2 is for the dependent variable specifically measuring demand on government-funded unemployment compensation. In both models, we observe that variable *Trade* (as percent of GDP) is positive and significantly associated with supporting greater role of government. Both models show consistent evidence supporting H1a that individuals living in

¹Figure A1 in Appendix provides more information about more respondents' preferences on government responsibility in social protection and unemployment subsidies.

²We present detailed descriptions about control variables and relevant robustness checks in the Statistical Appendix. Worth to note, all the Tables are provided in the Statistical Appendix.

³In the Statistical Appendix, we provide additional models using clustered standard errors as the robustness check (Tables A7 and A8). The alternative model specification produce similar substantive results. Where we also present more detailed discussions about the multilevel model we adopt.

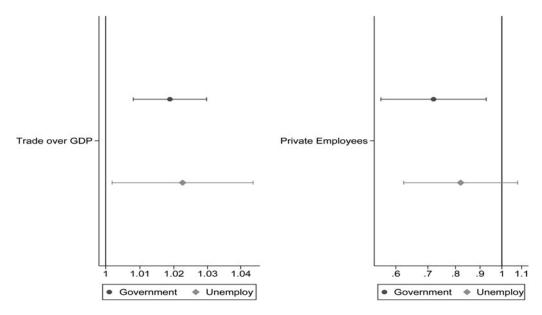


Fig. 1. Odds ratio coefficients and 95 percent confidence intervals, based on full models in Table A2.

provinces (or directly-administrated municipalities) with higher levels of trade openness are more likely to demand greater role of government in the social protection. The left-hand panel in Figure 1 shows the estimated odds ratios of variable "Trade", which are 1.018 and 1.025, in Model 1 and Model 2, respectively. These two odds ratios suggest a 1 percent increase in trade openness will lead to an increase in the probability of demanding government responsibility in providing one's living by 1.8 percent and an increase in the probability of supporting government-funded unemployment protection by 2.5 percent. The substantive effect size of foreign trade on individual social protection could be very large across different provinces, given the extensive range of foreign trade across Chinese provinces (from 4 to 144 percent).

Table A2-Model 1 also confirms *Hypothesis 2* that private-sector employees are less likely than public-sector employees to demand greater government responsibility in providing for one's living (b = -0.329, p < 0.05). The corresponding odds ratio is approximately 0.70. This odds ratio indicates that individuals from private sectors will be less likely to demand government responsibility in economic welfare than their counterparts in the public sector by a probability of 30 percent. This finding is substantively significant in support of our theory that workers in private sectors strongly disfavor the expansion of government's role in social protection.

Key findings in Table A2 remain robust in two robustness checks. First, since our empirical sample includes 24 different sub-national units, it might be possible that some provinces with a very high level of trade openness would bias the empirical estimation. It is also possible that some unobserved province-specific factors could affect individuals' labor market risks. In our Statistical Appendix, we re-estimate our models by adding provincial fixed effects. This robustness check confirms the empirical results reported in the main manuscript (Table A9). The fixed-effects specification produces slightly larger coefficient sizes for our two key explanatory variable. The coefficients for trade openness in two models increase from 0.019 to 0.103 (government responsibility) and 0.022 to 0.329 (unemployment subsidies) while private-sector employees show a lower coefficient at -0.377 from -0.329.

Second, we posit that foreign trade affects individuals' labor market risks as a form of an external economic shock. Therefore, we replace the level of foreign trade by an annual change measure. Using the yearly difference between 2011 and 2012 over the total trade volume in 2012, we probe

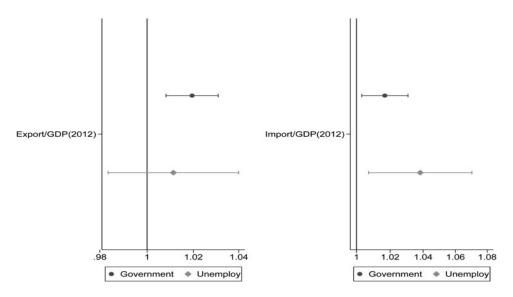


Fig. 2. Odds ratio coefficients and 95 percent confidence intervals, based on full models in Table A3.

whether the change ratio of trade significantly affect one's social policy preferences. We provide these tests in the supplementary materials (Table A12). This robustness check further confirms our theory that trade openness treated as an economic shock does drive individuals' demand on government responsibility in social protection. In addition, considering the lagged effect of trade on individuals' labor market effects, we find that using trade data in 2011 produces highly consistent results in the supplementary materials (Table A12).

In Table A3, we present two additional models by decomposing the total trade into two parts: exports over local GDP and imports over local GDP. Consistent with our theoretical expectation, Model 3 and Model 4 support *Hypothesis1b* and *Hypothesis1c* by providing more nuanced tests on how exports affect individuals' social protection preferences differently from imports. Specifically, we find that residents who live in a province with greater exports tend to demand a higher level of government intervention and unemployment subsidies. However, exports' effect on unemployment subsidies does not reach statistical significance because export sectors could bring about more new jobs for local people that absorb many workers from declining domestic firms. In contrast, imports increase an individual's support for unemployment subsidies and the role of government in distribution. Figure 2 visualizes the odds ratio coefficients derived from Table A3. Figure 2 shows the odds ratios for export in model 3 is 1.02, which means a one-unit increase in the export will lead to an increase in the probability of demanding the role of government by 2 percent. The odds ratios for imports in Model 3 and Model 4 are 1.01 and 1.04, respectively. Imports' effect on one's support for job-related subsidies (4 percent) is higher than the demand for income-related social protection (1 percent). Moreover, the empirical findings of private-sector employees on social protection preferences are consistent with Models 1 and 2 in Table A2.

A quick review of the control variables in Tables A2 and A3 shows expected relationships. Provincial-level unemployment rate is positively associated with demand on the role of government in social protection and unemployment compensation across four models. In the Chinese context, we do not find evidence that FDI and individuals' skill assets significantly affect their social policy preferences.⁴ While previous studies in the context of advanced economies find

⁴We find skilled workers are less likely to demand government-funded social protection, using the fixed-effects specification shown in the Statistical Appendix, Table A9.

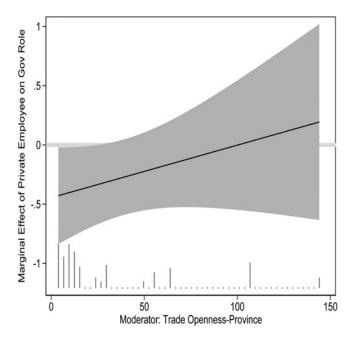


Fig. 3. Marginal effect of supporting government responsibility by occupation sector among individuals as province-level trade varies.

the service sector is positively associated with demand on government-funded social protection (Iversen and Cusack, 2000), we find in the Chinese context, the expansion of service sector is associated with decreases in support for government responsibility in social protection. Female workers are more likely to demand unemployment-related benefits than the role of government in social protection. This finding suggests that women are motivated by sociotropic factors such as family-related job security (Mansfield et al., 2015). Last but not least, individuals' perceptions on income inequality significantly affect their social protection preferences. Those who endorse egalitarian values are more likely to support a higher level of social protections.

To test Hypothesis 3 regarding the joint effect of trade openness and private-sector jobs, we present two models in Table A4. Trade openness and workers' job sectors are significant predictors of individuals' social protection preferences, as shown in Table A4. In Model 5, we find some evidence that trade openness moderates the effect of private-sector jobs. Private-sector employees exhibit lower levels of support to the role of government in social protection, but the public-private divide in policy preferences diminishes as trade openness increases. Figures 3 and 4 further illustrate the interactive effects.⁵ Figure 3 shows the marginal effects of private employees across the full range of the trade openness variable. We find that the marginal effect of private-sector jobs is negative and statistically significant in provinces with low trade openness (i.e., total trade volume accounting for less than 30 percent of provincial GPD). As trade openness increases, the marginal effect becomes not distinguishable from zero, meaning that in Chinese provinces with high levels of trade openness, there is a convergence of policy preferences between public and private-sector employees. Figure 4 demonstrates the marginal effects of trade openness on the support for government-funded protection between two job sectors. It shows that trade openness has positive marginal effects on demand for public-funded social protection across both job sectors.

⁵We use the *interflex* package in STATA to generate visualizations of the conditional marginal effects of trade openness and private-sector jobs(Hainmueller et al., 2019). The visuals are produced using bootstrap standard errors with 1500 replications, which mitigates the potential bias because of the small number of clusters (provinces) in our sample.

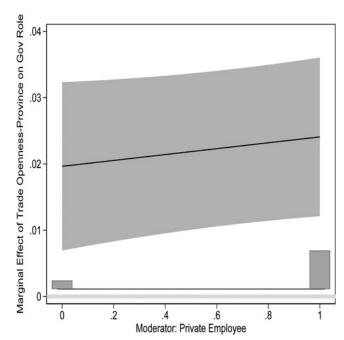


Fig. 4. Marginal effect of supporting government responsibility by trade openness as occupation sector among individuals varies.

5. Concluding discussions

In this paper, we provide a risk model to emphasize how trade openness and job sectors jointly shape social policy preferences in the largest emerging market. Despite the fact that China has long been a socialist country, Chinese workers are now exposed to different labor market risks. The empirical results show that trade openness and job sectors breed into more heterogeneous preferences in the social policy area among Chinese citizens.

This paper contributes new insights about social policy preferences in open emerging markets. Our paper identifies who is helped, hurt, and sheltered in one largest emerging market, by drawing upon insights from the "new new trade theory". We theorize and present that individuals from export-intensive and import-intensive areas face rising labor market risks and therefore demand higher social protection in China. This study also provides new evidence in the context of emerging markets, that trade does increase workers' demands for greater social protection, but more saliently among those in private sectors. This finding diverges from the argument that globalization exposure does not increase workers' demand for job-related protections when they mainly rely on insurance (Lim and Burgoon, 2018). Based on a risk model of social protection, our paper finds that trade-induced economic risks motivate private-sector workers to demand higher protections, although they have limited accesses to public-funded social protections (Frazier, 2011; Holland, 2018; Huang, 2019).

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/psrm.2022.10. To obtain replication material for this article, please visit: https://doi.org/10.7910/DVN/I8SPKO

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