

# Economics and political economy of agricultural trade-related policies in China

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# Table of Contents

Abstract .....	V
Declaration.....	VIII
Acknowledgements .....	IX
List of Tables .....	X
List of Figures .....	XI
<b>Chapter 1: Introduction.....</b>	<b>1</b>
1.1 Background.....	1
1.2 Literature review .....	3
1.2.1 Determinants of long-term trends in distortion policies .....	3
1.2.2 Short-term trade restrictiveness and world price fluctuations .....	4
1.2.3 Domestic public storage policy and price stabilization .....	5
1.3 Research questions .....	6
1.4 Structure of the thesis .....	6
<b>Chapter 2: Determinants of agricultural protection trends in China: Theory .....</b>	<b>9</b>
2.1 Introduction.....	9
2.2 Literature review .....	11
2.3 Income distribution model.....	13
2.3.1 Why extend to a three-sector model? .....	13
2.3.2 Model assumptions.....	13
2.3.3 Three-sector general equilibrium assuming no trade distortions .....	15
2.3.4 Income redistribution effects of changing agricultural trade distortions.....	17
2.4 Political support model.....	24
2.4.1 Model settings and predictions .....	24
2.4.2 Illustration of political equilibrium .....	27
2.4.3 Determinants of partial political equilibrium.....	29
2.5 Conclusions.....	30

**Chapter 3: Determinants of agricultural protection trends in China: Empirics ..... 32**

3.1 Introduction..... 32

3.2 Literature review ..... 34

    3.2.1 Earlier literature ..... 34

    3.2.2 Recent developments..... 35

3.3 Data and methodology..... 36

    3.3.1 Variable descriptions and data sources..... 36

    3.3.2 Estimation methodology..... 40

    3.3.3 Estimation expectations ..... 41

3.4 Main results..... 42

    3.4.1 Economic factors and the self-sufficiency ratio..... 42

    3.4.2 Poverty and inequality ..... 45

    3.4.3 Political contributors ..... 48

3.5 Robustness checks..... 51

3.6 Conclusions..... 52

Appendix ..... 54

**Chapter 4: Geographic politics, loss aversion, and trade policy: The case of cotton and China ..... 59**

4.1 Introduction..... 59

4.2 Literature review ..... 60

    4.2.1 Political incentives driving inefficient and suboptimal policies ..... 60

    4.2.2 Loss aversion and trade policy interventions..... 62

4.3 Geography, politically sensitive products, and preference ..... 63

    4.3.1 Geography and politically sensitive products..... 63

    4.3.2 Politically sensitive regions: Xinjiang ..... 64

    4.3.3 The role of cotton in Xinjiang..... 65

    4.3.4 Cotton trade policy in China ..... 67

4.4 Theoretical framework ..... 71

    4.4.1 Model assumptions..... 71

    4.4.2 A small country model: Three scenarios ..... 75

    4.4.3 Do terms of trade effects matter?..... 82

4.5 Empirical test ..... 89

4.5.1 Data sources .....	90
4.5.2 The effects of political sensitivity on cotton trade protection .....	91
4.6 Conclusions .....	99
Appendix .....	101
<b>Chapter 5: Political economy of trade and storage policies coordination, and the role of domestic public storage in the world market .....</b>	<b>102</b>
5.1 Introduction.....	102
5.2 Literature review .....	105
5.3 Government motivations behind domestic storage policies .....	106
5.3.1 Model framework and predictions .....	106
5.3.2 China’s role in the world cotton market .....	115
5.4 Data and methodology.....	116
5.4.1 Data and variables .....	116
5.4.2 Setting the VAR model.....	118
5.5 Diagnostic tests, estimation, and forecast evaluations .....	119
5.5.1 Stationary tests .....	119
5.5.2 Fix the lags of the dependent variables .....	120
5.5.3 Cointegration test and equations test.....	121
5.5.4 Model evaluation based on two types of forecasts.....	122
5.5.5 Dynamic interactions between variables .....	124
5.6 Simulations .....	128
5.6.1 Does China’s storage cause the world cotton price to change? .....	128
5.6.2 Simulating the effects of a reduction of China’s cotton storage .....	129
5.7 Conclusions.....	131
<b>Chapter 6: Conclusion and policy implications .....</b>	<b>133</b>
6.1 Concluding remarks .....	133
6.2 Policy implications .....	136
Appendix: List of Abbreviations .....	137
Bibliography .....	138

## **Abstract**

This thesis seeks to understand the simultaneous economic and political contributors to China's changing agricultural protection levels and the central government's choice of policy instruments to tax or assist farmers. It begins in Chapter 2 by theoretically exploring the motivations behind agricultural trade-related support policies through extending the two-sector specific factors production model to three sectors, to make it more relevant for a one-party state such as China. That review suggests the switch from taxing to subsidizing the agricultural sector depends not only on changes in the economy's structure but, more critically, on the underlying political support from heterogeneous interest groups in the course of economic development. The equilibrium agricultural protection level is determined by equating the marginal political returns from supporting farmers to marginal political costs from opposing groups (including manufacturers).

Chapter 3 tests that theory empirically, using panel data on agricultural distortions for the period 1981 to 2010 from Anderson and Nelgen (2013). When using the relative rate of assistance as the agricultural protection indicator, the results are robust. The study concludes that (1) arable land per capita, the proportion of the workforce in the agricultural sector, and the self-sufficiency ratio are more significant in China than elsewhere; and (2) inequality is more significant than poverty in contributing to the changes in China's agricultural trade-related policies.

Around that long-running trend in the level of assistance to the farm sector are considerable fluctuations in support from year to year, not least because of fluctuations in international prices of agricultural products. Chapter 4 seeks to explain the Chinese government's responses to world market price fluctuations. It develops a theoretical model of trade policy incorporating loss aversion and reference dependence. Like Freund and Özden (2008), this chapter (unlike Chapter 5) assumes only trade policy instruments are available to the

government, but it goes beyond their model by adding a spatial dimension to interest-group politics. The model suggests that: (1) politically sensitive products receive more trade protection; (2) the government's changing trade distortions insulate the domestic market from international price fluctuations by setting trade protection lower (higher) when the world price is higher (lower) than a targeted domestic reference price; and (3) variations in market intervention help producers at the expense of consumers in periods when the international price is well below trend, and help consumers at the expense of producers in high-price periods. These predictions from theory are shown to still hold when the model is extended to a large country case involving terms of trade effects. The model is tested empirically and found to offer a plausible explanation of the puzzling changes in cotton protection in China.

In practice, the government does have other instruments besides trade restrictions to alter domestic producer and consumer prices in the face of fluctuating international prices. Chapter 5 explores the role that public storage policy can play in contributing to the government's objective of stabilizing the domestic market price of farm products. The political economy theory developed in Chapter 4 is extended to incorporate domestic storage, so as to explore government motivations in the context of border and domestic policy coordination. Domestic storage policy can add to price stabilization in the presence of trade policies, and can reinforce a price-insulating trade policy through increasing the country's market power. However, the effects of these two price stabilization instruments on the international market price are in opposite directions. The effect of storage on the world market is then tested, again using China cotton as a case study. The VAR econometrics reveal that in the case of cotton during 2011-14, China as a large player in the global market was able to stabilize to a non-trivial extent the international price of cotton through altering its public stockpile.

The final Chapter of the thesis draws out implications for policy makers in China and elsewhere. One is that the Chinese government should not apply trade distortions since they

reduce resource allocation efficiency, social welfare, and consumer utility. Another is that domestic public storage policy, rather than trade distortions, could be an effective way to achieve domestic political targets. If managed well enough, storage could be less distortive of world agricultural markets than trade policy; but if poorly managed, it could add to the disruptions that trade policies bring to those markets.

**Key words:** Political economy, agricultural trade-related policies, public storage policy, international market price volatility, geographic politics, loss aversion, specific factor model, political support model, cotton, China

**JEL classification:** C32, E64, F13, F14, F59, Q11, Q17, Q18, D72, O38

## **Declaration**

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and, where applicable, any partner institution responsible for the joint-award of this degree.

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## List of Tables

Table 2-1: Agricultural protection levels in China, 1981 to 2014.....	10
Table 3-1: List of variables and data sources .....	38
Table 3-2: Summary statistics .....	40
Table 3-3: Nominal Rates of Assistance and economic determinants.....	43
Table 3-4: Nominal Rates of Assistance and poverty ratio .....	46
Table 3-5: Nominal Rates of Assistance and income inequality .....	48
Table 3-6: Nominal Rates of Assistance and political institution quality .....	49
Table 3-7: Nominal Rates of Assistance and political institution quality .....	50
Table 3-8: Relative Rates of Assistance and economic determinants .....	54
Table 3-9: Relative Rates of Assistance and poverty ratio .....	55
Table 3-10: Relative Rates of Assistance and income inequality.....	56
Table 3-11: Relative Rates of Assistance and political quality .....	57
Table 3-12: Relative Rates of Assistance and institutional quality .....	58
Table 4-1: Proportion of minority in total population in each province in 2014.....	65
Table 4-2: Cotton net import value during 2005 to 2015.....	68
Table 4-3: Effect of politically sensitive product on the changes of protection level .....	93
Table 4-4: Correlation between cotton trade protection and international market price .....	96
Table 4-5: World price changes on changes of cotton protection level.....	97
Table 4-6: Changes of the world price and changes of protection level .....	98
Table 4-7: Statistics of Han-Uyghur conflict cases during 2007 to 2015 .....	101
Table 5-1: China's role in the international cotton market .....	115
Table 5-2: Overview of data and sources.....	117
Table 5-3: Basic statistics of variables.....	118
Table 5-4: Unit root tests on data series during 1975 to 2014.....	120
Table 5-5: Selection-order criteria output .....	120
Table 5-6: Results of equation by equation diagnostic tests .....	121
Table 5-7: Results of block exogeneity (Granger causality) test.....	129

## List of Figures

Figure 2-1: China's changing agricultural protection levels during 1981 to 2010 .....	9
Figure 2-2: Model assumptions about the structure of the economy .....	15
Figure 2-3: Illustration of the model's market equilibrium.....	16
Figure 2-4: Political market for agricultural protection .....	28
Figure 3-1: NRAs and GDPPC, China and other developing countries .....	33
Figure 3-2: Heterogeneous effects of determinants on agricultural protection between China and the rest of the world .....	42
Figure 4-1: Cotton trade protection fluctuations between Jan 2005 and Jan 2015.....	60
Figure 4-2: Geographic distribution of China's cotton production in 2012.....	66
Figure 4-3: China's actual Tariff Rate Quota system .....	68
Figure 4-4: China's cotton import composition during 2008 to 2013 .....	69
Figure 4-5: Cotton compared with other agricultural products' trade protection.....	92
Figure 4-6: Relationships between world price, reference price and trade protection .....	95
Figure 5-1: Stock-to-use ratio and world cotton price .....	103
Figure 5-2: Nash world price as functions of preferences for price stability and storage revenue .....	114
Figure 5-3: VAR model's stability test .....	122
Figure 5-4: Within-sample prediction of VAR model .....	122
Figure 5-5: Out-of-sample forecast between 2011 and 2014 .....	123
Figure 5-6: Responses of world cotton price to changes in all other variables .....	125
Figure 5-7: Forecast error variance decomposition .....	127
Figure 5-8: Simulations of decreasing China's cotton storage by 20% (Scenario 1) and 50% (Scenario 2).....	130