Why Will China Establish a Government-Sponsored Response Mechanism in Countervailing Games?

Julien Chaisse
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LUAN Xinjie and Julien CHAISSE

1 INTRODUCTION

China's economic development has caught the world's attention since its opening up to the outside world in 1978. The value of China's foreign trade exceeded US$2.56 trillion and its exports over US$1.42 trillion in 2008, and thereby China has become the world's third largest trading country. At the same time, Chinese authorities have implemented a series of industrial policies and special plans to promote the optimization of industrial structure and to speed up the transformation of foreign trade development modes. Clearly, the Chinese government's application of taxation and fiscal support tools under the aforesaid policy and its special plans have a significant effect on the development of its industries. But along with the increase in China's export trade, the trade frictions between China and other countries (inter alia, the United States, the European Union (EU) and Canada) have become more intense. Since antidumping, the technical barriers and the Section 337 investigations under the Tariff Act of 1930 of the United States, Chinese enterprises have also faced numerous countervailing duty (CVD) investigations by these countries in recent years.

1 LUAN Xinjie is Professor and Director of the International Trade Institute, China Jiliang University, Hongzhou, China and Guest Senior Researcher at China's World Trade Organization Institute, University of International Business and Economics, Beijing. The author can be contacted at: hzluan@163.com. Dr Julien CHAISSE is Senior Research Fellow at the World Trade Institute, Bern, Switzerland and visiting Professor, Wuhan University, Faculty of Law, China. The author can be contacted at: julien.chaisse@wti.org.

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4 For example, in the latest Section 337 Investigation, which was initiated by the US International Trade Commission (ITC) on March 20, 2008, four of the twenty-nine corporations involved are Chinese ones. See ITC, ITC institutes section 337 investigation on certain short-wavelength light emitting diodes, laser diodes and products containing same, News Release 08-027, Inv. No. 337-TA-640, at http://www.usitc.gov/ext_relations/news_release/2008/er0320f12.htm (last visited September 10, 2008).

5 On April 13, 2004, the Canada Border Services Agency (CBSA) announced the initiation of an investigation into the alleged injurious dumping and subsidization of outdoor barbecues from the People's Republic of China, which was also the first countervailing duty investigation in the world into China's exports. For details, see CBSA, Canada Border Services Agency starts a dumping and subsidy investigation into outdoor barbecues, available at http://www.cbsa-asfc.gc.ca/media/antidumping/2004/0413ottawa-eng.html (last visited August 12, 2008).
It should be stressed that Sino-US trade relations have entered phase 3 (2006 onwards). During this phase, the United States not only supervises China's implementation of its World Trade Organization (WTO) accession commitments, but has also requested China to open the domestic market further and to widen the economic reform. Thus China has been faced with a bigger challenge than ever before. On 25 October 2007, the final definite subsidy determination of the US Department of Commerce (DOC) in the coated free sheet (CFS) paper investigation set a controlling precedent for subsequent CVD investigations against exports from China.

Against this background, Section II of this article explains in detail the argument that China will establish a government-sponsored countervailing response mechanism (GSCRM). Sections III and IV introduce game models and analyse the game results of different countervailing response alternatives of Chinese exporting enterprise(s) and/or corresponding governmental sectors. Noting that the Chinese Province of Zhejiang's balance of trade (US$79.75 billions) accounted for over one-third of China's total balance of trade in 2007 (US$262.2 billions), and that the foreign trade administration authorities in Zhejiang Province pay great attention to the CVD investigations of the importing countries, Zhejiang Province can be regarded as an empirical example to illustrate the importance of the GSCRM. Section V presents the conclusions.

2. ARGUMENT FOR ESTABLISHING THE GSCRM

What should be clarified above all is the argument for establishing the GSCRM. Under the definition of subsidy under Article 1 of the Agreement on Subsidies and Countervailing Measures (SCM Agreement) of the WTO, a subsidy shall be deemed to exist if “(a) (1) there is a financial contribution by a government of any public body within the territory of a Member”; “(a) (2) there is any form of income or price support” which operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into, its territory”; and “(b) a benefit is thereby conferred”. It is evident that without governments there are no subsidies. That is to say, if a government is not involved then there cannot be any subsidy.


What is more, there are also fundamental differences between dumping and subsidy, explained by the WTO as follows:

"Dumping is an action by a company. With subsidies, it is the government or a government agency that acts, either by paying out subsidies directly or by requiring companies to subsidize certain customers. But the WTO is an organization of countries and their governments. The WTO does not deal with companies and cannot regulate companies' actions such as dumping. Therefore the Anti-Dumping Agreement only concerns the actions governments may take against dumping. With subsidies, governments act on both sides: they subsidize and they act against each others' subsidies. Therefore the subsidies agreement disciplines both the subsidies and the reactions." (emphasis added).

It is also not difficult to see that the subsidies, i.e., financial contributions conferring some benefit, are granted by the government, and thus, the government should be in the best position to deal with a CVD investigation of the importing country. In other words, responding to the countervailing measures is a behaviour that is much more policy-oriented than market-oriented. This argument is also validated by a special procedure in the Canadian CVD investigation into China's exports whereby the Canada Border Services Agency (CBSA) always sends a subsidy Request for Information (RFI) to all selected exporters as well as the Government of China. As a consequence, it is in compliance with the provisions under the SCM Agreement for the governmental sectors to constitute a GS CRM so as to coordinate the dominant strategies of all interested parties whereas China decided to take countermeasures against the CVD investigations of the importing countries.

3. DOMINANT GAME OF THE ENTERPRISE CONCERNED WITHOUT THE GS CRM

The non-cooperative game means that the enterprises involved make an independent, rationality-bounded and selfish choice of dominant strategies (response or failure to respond) in the absence of coordination, when they encounter the CVD investigations of, for instance, the United States DOC.

3.1 THREE HYPOTHESES

Three hypotheses are stated below:

First, it is assumed that a CVD investigation initiated by the US authorities is a public event, and can be acknowledged by enterprises with similar interests. In fact, the DOC always issues a public notice of the initiation of a CVD investigation in its Federal Register and sends each interested party a copy of the questionnaire. If a large number


of producers and exporters of the like product being investigated exist, a copy of the questionnaire is sent at least to each selected mandatory respondent, including the government of China. So, this hypothesis is generally tenable.

Second, it is supposed that the Chinese trade administration is functionally absent in countervailing action in the absence of a GSCRM. In that case, the enterprises involved may disregard the countervailing complaints but not compulsorily take certain countermeasures against the CVD investigation.

Third, for simplicity, the following four factors are considered only for the exporting enterprises:

(i) cost of responding;
(ii) investment in developing the American market before the complaint;
(iii) market share in the United States;
(iv) social effect.

The sub-factors of each factor and their individual payoff condition are listed in Table 1.

<table>
<thead>
<tr>
<th>Considered factor</th>
<th>Payoff condition</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>responding cost</td>
<td>response</td>
<td>−1</td>
</tr>
<tr>
<td></td>
<td>failure to respond</td>
<td>0</td>
</tr>
<tr>
<td>market investment before</td>
<td>win</td>
<td>2</td>
</tr>
<tr>
<td>the complaint</td>
<td>loss</td>
<td>−2</td>
</tr>
<tr>
<td>market share</td>
<td>win</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>loss</td>
<td>−3</td>
</tr>
<tr>
<td>social effect</td>
<td>response</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>failure to respond</td>
<td>−4</td>
</tr>
</tbody>
</table>

Source: compiled by the authors.
Note: the absolute value of payoff represents the importance of each factor considered. For instance, the social effect of response is much more important than the response cost paid by the exporting enterprises involved. In addition, the first three factors represent the short-term payoff and all four factors, the total payoff.

For the US competitors, namely, the petitioners or complainants filing the subsidy complaints, we consider only two essential factors:

(i) the cost of filing a complaint and future costs. If filing a complaint, the complainant's payoff will be −1 for his paid cost; if no complaint is filed the cost will be 0.

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(ii) market share. If the complainant wins, his payoff will be 3; if he loses -3.

In view of the fact that the DOC’s final determination in a CVD investigation against China’s exports is a contingency, the Chinese enterprise will adopt a contingent strategy in accordance with the incomplete information it has collected and thus the optimum choice of this enterprise may be either a “response” or “failure to respond”. In these circumstances, there can be three different game models as described below.

3.2. GAME MODELS

3.2.1 THE INDIVIDUAL ENTERPRISE’S ALTERNATIVE UNDER DOMINANT STRATEGY EQUILIBRIUM

The game model in Figure 1 illustrates how the involved enterprise A in China decides to respond or not on consideration of its own short-term and total payoff in a CVD investigation. This gamble model describes A’s alternative to the dominant strategy. However, the long-term payoff is the most important factor influencing A’s contingent strategy. As mentioned earlier, the US CVD investigation is a contingency before the circulation of the DOC’s final subsidy determination, and therefore this model represents an incomplete information game.

Node 1 represents the best choice of A. The short-term payoff of its failure to respond is -5 (0-2-3) while total payoff is -9 (0-2-3-4). In the long run, A loses in terms of investment in comparison with the earlier period, the share in the US market, and also achieves a negative social effect owing to its keeping silent in the CVD investigation, and thus A’s total payoff is negative.

Node 2 represents the result of response to the countervailing investigation. If A wins, the short-term payoff reaches 4 (-1+2+3) while the total payoff is 8 (-1+2+3+4). So “response” is a more favourable strategy for its future export development than failure to respond.

![Figure 1: Payoff dominant games of individual exporting enterprise](source: Compiled by the authors.)
The short-term payoff is \(-6\) \((-1-2-3\)) if A loses, that is to say, A loses in terms of its export market and market-developing investment compared to the earlier period and also pays the responding cost. However, the total payoff reaches \(-2\) \((-1-2-3+4\)), which is less than the total payoff (8 as counted above) if he wins. But the US countervailing authorities usually encourage respondents with a lower countervailing duty rate (or value), which potentially affects the US market share of these exporting enterprises, to cooperate with the US countervailing authorities under their countervailing rules, whereas “response” is also beneficial to an exporting enterprise in helping to portray a positive social image. Total payoff if the case is lost is therefore still higher than total payoff following “failure to respond” \((-9\)).

As far as A is concerned, the American CVD investigation is vital to its future development, and therefore more attention is paid to long-term profit than to short-term profit. Regardless of winning or losing in defending a US countervailing investigation, the total payoff in the case of a response is always higher than in the case of failure to respond. So response is A’s dominant strategy, or, in other words, A’s rational choice should be “response”. This is the very reason why some enterprises voluntarily respond to the Doc’s CVD questionnaire in a CVD investigation, even though they have not been selected by the Doc as a mandatory respondent.\(^\text{13}\) However, few of the export enterprises in China are willing to do this and, moreover, certain exporting enterprises chosen as the mandatory respondents refuse to respond to the CVD investigations\(^\text{14}\) or withdraw the materials required for the response.\(^\text{15}\)

### 3.2.2 Alternative of Exporting Enterprises and Petitioners Under Dominant Strategy Equilibrium

Figure 2 is a game model indicating a different dominant strategy choice of enterprise A and the US domestic producers. As regards A’s payoff, both the market share and social influence are important attributes, but the US competitors’ main consideration is market share and therefore this model discusses in essence the final outcome of “a war for market”. Since the US competitor commonly adopts dominating the market of the US as its dominant strategy, this model is a complete information gambling model.

Node 1 represents the contingency strategy of exporting enterprise A, namely response or failure to respond. In the case of A’s failure to respond, the Doc may base

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\(^{13}\) Ibid.

\(^{14}\) For instance, in the case of Light-walled Rectangular Pipe and Tube from China, a mandatory respondent, Qingdao Xiangxing Steel Pipe Co., Ltd. did not respond to the Doc’s CVD questionnaire. Ibid.

\(^{15}\) Taking Shandong Chenming Paper Holdings Ltd (Chenming) as an example. This enterprise withdrew the materials it had submitted in the CVD investigation into coated free sheet and finally the Doc was “unable to verify which programs actually conferred benefits on Chenming” and “made the adverse inference that Chenming received countervailable subsidies under 20 subsidy programs”. See Doc, Issues and Decision Memorandum for the Final Determination on the Countervailing Duty Investigation of Coated Free Sheet from the People’s Republic of China, October 17, 2007.
the countervailable subsidy rate for A on adverse facts available (AFA) for the final countervailing determination. The payoff of the US competitor (petitioner) usually reaches the maximum 3 (0+3), but A's payoff reaches -9 (0-2-3-4), because the latter simultaneously loses its exporting market and market-developing investment from the earlier period. What is more, the negative social effect results from the petitioner's failure to respond to the CVD investigation.

Node 2 represents the different payoffs of A and the US competitor (i.e., the petitioner) under the circumstance of A's application of a responding strategy. If A wins, A's payoff is 8 (-1+2+3+4) while the US competitor's payoff is -4 (-1-3), because the US competitor bears the complaint cost. If A loses, the total payoff of A reaches -2 (-1-2-3+4), because A bears the responding cost and, in the meantime, loses exporting market and the market investment made before the complaint. Even so, the responding party produces positive social effects and therefore A's total payoff is only -2, as stated above. In considering that A's failure to respond during the CVD investigation results in the highest payoff for the petitioner, in the petitioner's view, A's best alternative is to keep silent and fail to respond.

Being aware of the dominant strategy of the petitioner, namely A's failure to respond when the petitioner files a countervailing complaint, A should choose to respond in a CVD investigation, even if it would lose. After all, the total payoff in the case of a final definite CVD being collected is still higher than that of failure to respond.

3.3 THE DOMINANT STRATEGIES OF DIFFERENT EXPORTING ENTERPRISES

Figure 3 is a game model describing the dominant strategies of different exporting enterprises, such as A and B in China. As for the scale effect of a collective response in the same CVD investigation, when both A and B adopt response as their dominant
strategy, A maintains a higher social effect than would be the case if A was responding alone. Accordingly, the social effect of collective response becomes 5 instead of 4. The social effect of collective non-response is also correspondingly revised to become -5 instead of -4. The social effect of A and B's application of individual dominant strategy is still 4 or -4 as shown in Table 2.

Enterprise B has two alternatives, i.e., response or non-response, which is generally learnt about through the governmental or public information channels by enterprise A. So, this game model may be seen as a complete information gambling model. Node 1 is the dominant strategy of exporting enterprise B while node 2 is that of A. If A also responds while B's dominant strategy is response, then the minimum payoff of both A and B is a Nash equilibrium (-1,-1) (hereinafter "Nash equilibrium I"), which occurs when both A and B lose but both of them respond in the CVD investigation (-1-2-3+5). If A's contingency strategy is something like "free rider", then A's

<table>
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<tr>
<th>Table 2: Payoff considering more than a single enterprise</th>
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<tr>
<td><strong>Factor considered</strong></td>
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<tr>
<td>responding cost</td>
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<tr>
<td>market investment before the complaint</td>
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<td>collective social effect</td>
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*Source: compiled by the authors.*
minimum payoff is $-9$ ($0-2-3-4$) and B's, $-2$ ($-1-2-3+4$), contrary to the previously described situation. This kind of sub-game between A and B is not a zero-sum game and total payoff ($-11$) of A and B will be much less than in the case that both A and B lose although both of them respond.

If both A and B choose keeping silent as their individual dominant strategy, each of them has a payoff of $-10$ ($0-1-2-3-5$). It is apparent that $(-10, -10)$ is another Nash equilibrium (hereinafter “Nash equilibrium II”). Compared to the free-rider case, the total payoff to both A and B decreases considerably. That is why the governmental functional sectors will encourage or even force, with a mandatory mechanism, the related enterprise(s) to respond actively to the US CVD investigation actively.

There are two Nash equilibria in Figure 3, which are subject to what the authors call “enterprises' psychology orientation”. Specifically, if both A and B are enterprises tending to risk aversion, then both will choose the much more conservative, and also lower-profit, Nash equilibrium II ($-10, -10$) because of the uncertainty of the Doc’s final determination, while responding to a US CVD investigation. By contrast, if both A and B are risk takers, then $(-1, -1)$ becomes a Schelling Point utilised to avoid the maximum loss. With the possibility of the Doc's final affirmative CVD determination, Nash equilibrium I is treated as a risk-dominant Nash equilibrium. In other words, any Chinese response enterprise may encounter the risk of failure in countervailing response.

Considering that the Nash equilibrium is non-unique and both Nash equilibria may prevail for exporting enterprises, the governmental functional sectors will play a key role in the defence of CVD investigations so as to acquire a Nash equilibrium with a higher payoff $(-1, -1)$ (herein the Nash equilibrium (9, 9) where both A and B are winners in a CVD investigation with maximum payoff $(-1+2+3+5)$, but not indicated in Figure 3). The guidelines of the Chinese administration authorities should be to establish a GSCRM and thereby avoid the above-described Nash equilibrium II with the lower payoff.

4. THE GOVERNMENT-SPONSORED COUNTERVAILING RESPONSE GAME

This sub-section discusses the importance of the GSCRM by analysing the final results of games (i.e. response or failure to respond in US CVD investigations) with the GSCRM.

4.1 THE FACT AND HYPOTHESIS

4.1.1 A FACT

As said at the outset of this article, the United States' application of its CVD law to imports from China is no longer a disputed issue. The Doc's initiation of its first CVD
investigation against Chinese CFS paper on November 20, 2006 is a well-established fact and demonstrated that the DOC "has the authority to apply the CVD law to China". Moreover, in the Doc’s opinion, “while Congress (like the Federal Circuit) deferred to the Department’s practice, as was discussed in Georgetown Steel, of not applying the CVD law to the NMEs, it did not conclude that the Department was unable to do so,” even though it would continue to designate China as a nonmarket economy (NME).

As a result, the governmental functional sectors in China and the exporting enterprises concerned only have two choices – either to respond or to fail to respond – when the US Doc or domestic industries file a subsidy complaint.

4.1.2 A HYPOTHESIS

It is supposed that China will establish a mature GSCRM and will apply the GSCRM.

Under the circumstances of China’s establishment and implementation of the GSCRM, the cost to China’s exporting enterprise if it chooses to respond will be counted as zero because the Chinese government can encourage the exporting enterprise to respond to the CVD investigation by means of its financial support policy. The payoff of the social effect of collective response reaches 6, which is higher than the payoff (5) under the situation of collective response without the GSCRM (see Table 2 above). Of course, the social effect of collective failure to respond becomes 6 under the circumstance of China’s establishment and implementation of its GSCRM, as shown in Table 3.

<table>
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<td>collective</td>
<td>response</td>
<td>6</td>
</tr>
<tr>
<td>social effect</td>
<td>failure to respond</td>
<td>-6</td>
</tr>
</tbody>
</table>

Source: compiled by the authors.

18 Ibid.
19 Ibid.
4.2 SPECIFIC GAME

If the DOC fails to initiate a CVI investigation, it demonstrates that the trade interests of the United States and China are equivalent, which means the payoffs to both sides, i.e. China and the United States are 5 (2+3), as shown in Figure 4. That also means the investment of China’s related exporting enterprise during the earlier period incurs no loss and its market share is unchanged.

If all the interested parties in China respond under the GSCRM when the United States initiates a CVI investigation against Chinese exports, the payoff of the winning respondent reaches 11 (0+2+3+6), which is higher than the payoff −11 (0−2−3−6) in the case of the respondent failing to respond, in as much as the interested parties respond under the GSCRM in a proactive, institutional and systematic manner. The maximum payoff of the United States reaches 2 when China’s respondent responds. In contrast, the maximum payoff of the United States is 3 if the Chinese respondent fails to respond. Ultimately, China’s payoff dominant equilibrium (11, 2) decides the final equilibrium solution to the Chinese respondent’s strategy sub-game (countervailing, response) and thus China’s intention to effectively prevent the DOC from taking the countervailing actions against Chinese exports is not only a deterrent but is also creditworthy under the GSCRM.

To sum up, the GSCRM is important both in theory and in practice. It is also clear that the Mechanism of Four Body Linkage20 and the System of Joint Conference for the Entire Zhejiang Countervailing Response Work established in March 200821 are the immature modality of the GSCRM. Of course, special note is also taken by the Joint

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20 The four bodies refer to the related functional sector at central government level, local foreign trade administration authorities, exporting enterprise and the relative association.

Conference of the normative implementation of governmental supporting policy and measures, and of compliance with the WTO SCM Agreement.

5. CONCLUSION

This article emphasizes the importance of eliminating the bounded rationality of the export enterprises in the countervailing counter-action so as to achieve a payoff dominant equilibrium in a countervailing-responding cooperation game. It can be concluded that the enterprise dominant strategy in a countervailing response should be replaced by a government-led dominant strategy, simply because the latter tends to be a favourable solution in the payoff dominant and coordination game. What should be stressed is that the setting up of the GSCRM in China is permitted under the provisions of the WTO SCM Agreement.

With the GSCRM, China's countervailing response can be made in a normative, systematic and effective manner and thus it is conducive to creating a good external environment for China's economic development. This is supported by Herbert Croly (1909), who stated that every popular government should in the end, and after prolonged deliberation if necessary, possess the power of taking any action which was demanded by the public welfare. This might be useful experience for other developing nations to take into account.

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References


