

# Lay attitudes to trade with low-wage countries

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## Abstract

Three studies presented scenarios to lay people to investigate their willingness to restrict imports. Greater restriction was preferred when similar goods were made at home, when the owners of the foreign businesses made very good profits, and, less consistently, when the goods came from a low wage country. Particular reluctance to import from a low-wage country did not vary with whether a home firm was likely to lose business or the level of understanding of comparative advantage, but was related to the profits made by foreign business owners. The results show that lay people views are based on concern for people in other countries as well as in their own.

Keywords: trade policy, attitudes, comparative advantage, lay economics.

## 1 Introduction

Do people have a particular reluctance to their country importing goods from low-wage countries? If so, what might be the basis for this reluctance? Both these questions have been raised within the field of international economics (e.g., Krugman & Obstfeld, 2000), but have not to my knowledge been the subject of empirical investigation. This paper investigates them.

To set the issue in context, it is worth first noting that lay people generally are not convinced of the benefits of free international trade, and recent survey results indicate that a majority of people in many western countries would prefer to see more rather than fewer restrictions on imports than exist at present (e.g., Mayda & Rodrick, 2005; Hainmueller & Hiscox, 2006). In this respect, the general public is at odds with the economics profession, samples of which have produced substantial majorities in favour of freeing up trade (e.g. Alston et al., 1992; Frey et al., 1984). The difference in views may well go back to the nineteenth century, and there have been several suggestions as to why the difference might arise (see,

e.g., Corden, 1974; Davidson et al., 2006; Gomes, 2003; Kemp, 2007; Mayda & Rodrik, 2005; Mayer, 1984; Olson, 1982; Scheve & Slaughter, 2001).

The focus of the present paper is narrower: Do people in developed countries particularly dislike importing goods from countries with low wages and low labour costs? And if so, why?

Before reviewing some reasons why people might not want to import from low-wage countries, it is worthwhile to note that there at least two reasons for expecting precisely the opposite result. Firstly, and most obviously, goods from such countries are likely to be cheaper. Taking a strictly selfish perspective, the vast majority of people benefit from being able to buy, for example, shirts, dairy products, or cars that are cheaper but of comparable quality to those made in one's own country. Secondly, taking a more utilitarian perspective, poorly paid workers in a foreign country could be seen as more in need of one's custom than higher-paid workers at home or in a rich foreign country.

On the other hand, there are several possible reasons why people might oppose importing from low-wage countries. Three of these reasons are investigated here: that people fear the business and job losses that result from local higher wage workers having to compete with low wage workers; that the dislike stems from failure to understand Ricardo's principle of comparative advantage; and that people fear that low-paid foreign workers are being exploited. These three reasons were investigated because they are related to three "misconceptions about comparative advantage" discussed by Krugman and Obstfeld (2000, pp. 23–26). A fourth reason, that people believe that goods imported from low-wage countries might

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\*The research was supported by a grant from the Psychology Department of the University of Canterbury. I am grateful for stimulating interactions with Jonathan Baron and Friedel Bolle. I am also very grateful to Friedel for his help in translating the questionnaire of Study 2, to Anika Köhler for help in obtaining a sample from eastern Germany, and to the Alexander von Humboldt Foundation for supporting me in Germany. Some of this work was presented at the 32<sup>nd</sup> Conference of the International Association for Research in Economic Psychology at Ljubljana, Slovenia in September, 2007, where a number of participants made constructive comments. Finally, I am happy to acknowledge insightful and helpful suggestions from two anonymous reviewers. Address Simon Kemp, Psychology Department, university of Canterbury, Christchurch, New Zealand. Email: Simon.Kemp@canterbury.ac.nz.

be of lower quality, was not investigated, but instead the effects of such a belief were controlled for in the studies that follow.

Perhaps the most obvious reason to resist importing from foreign low-wage countries is the fear that one's compatriots — or perhaps even oneself — might lose their businesses or livelihoods as a result of this competition. This is by no means an unreasonable fear. Although one can debate precisely how much unemployment arises from this cause rather than from technological advance, there is no doubt that people can lose their jobs or their businesses. It is also well-known that such losses can be enduring and have serious consequences for people's well-being (Irwin, 2002; Kletzer, 1998; Lucas et al., 2004; Trefler, 2001). Moreover, there is already good empirical evidence that people's opposition to importing goods increases if similar goods are available from producers in one's own country or if the consequences for employment at home are pointed out, although this previous research has not investigated the effect of the wage levels in the country supplying the imports (Baron & Kemp, 2004; Hiscox, 2006). It is important to note that this opposition arises not only from those whose livelihoods or businesses are personally affected, but also from others who are concerned for the welfare of producers and workers in their own country. Such concern could be considered as altruism for one's compatriots or as parochialism, and connects to a body of previous research investigating situations in which individuals may act in the interests of an in-group but not in their own interests or those of a wider out-group (e.g., Baron, 2001; Schwartz-Shea & Simmons, 1991; see Kemp, 2007, for discussion of trade implications). Nonetheless, although previous work leads us to expect opposition to imports that compete with home businesses, it is not clear that it should particularly matter if the imports originate in a low-wage country rather than one that pays higher wages but can still produce the goods more cheaply.

One of the most important economic arguments that greater welfare results from freer trade derives from Ricardo's (1817/1971) principle of comparative advantage. Very briefly, the principle suggests that where goods should be most efficiently produced depends on the ratio of the costs of production (comparative advantage) rather than on the absolute costs (absolute advantage). A corollary is that a country need not be the most efficient producer of any commodity in order to benefit from trade.

Krugman (1994) points out that some people might be generally hostile to trade because they misunderstand economic arguments for it, such as Ricardo's principle of comparative advantage. Ricardo's principle is neither trivial nor obvious (Samuelson, 1972), and Baron and Kemp (2004) found both that the principle was poorly understood by lay people, and that people with a lower

understanding of it tended to be more protectionist in outlook. Krugman and Obstfeld (2000, p. 23) suggest that a common myth — "Free trade is beneficial only if your country is strong enough to stand up to competition" — arises because of this misunderstanding. The authors go on to point out that the principle is important because a country which does not have an absolute advantage in producing a good over some other country might still have a comparative advantage. This comes about because the country's overall lower productivity is then reflected in lower wages, enabling it to sell the good for a lower cost in the other country. However, because the lower cost is linked to the lower wages, importing such goods might be seen as unfair by people in the other country.

Finally, it is possible that people might oppose imports from countries with low labour costs because they believe that workers in these countries are exploited by profiteering business owners who pay low wages (Krugman & Obstfeld, 2000). In this case, the opposition would arise from altruistic motives on behalf of the foreign workers. Of course, whether or not the exploited foreign workers really benefit from such altruistic protectionism is debatable. As Krugman and Obstfeld (2000, p. 24) point out: "What is the alternative?"

Three scenario studies investigating these issues are reported below. The first two studies feature research designs in which three different components or factors in the scenarios are systematically varied. The three factors are: whether the goods under consideration for importation come from a low or high wage country; whether similar goods are already made at home and home businesses might suffer from the competition; and the level of profit made by the owners of the foreign businesses. After reading each scenario, respondents are asked for their preferences about restricting the imports. It is obviously interesting to know whether the restriction preference varies with the other country's wages, but interactive effects are also important for evaluating why such a preference might arise. If there is a particularly strong preference for restricting imports when similar goods are made at home and the imported goods come from a low-wage country, this is a strong indication that the resistance to importing from a low-wage country is related to fear of competition and unemployment at home. Similarly, if people want to restrict imports from a low-wage country because they fear exploitation, we would expect resistance to importing from a country where the business owners make very large profits to be stronger when the imports come from a low-wage country.

Study 3 used a somewhat different method to examine the relationship between people's restriction preference and a test of their understanding of the principle of comparative advantage (taken from Baron & Kemp, 2004). The first and third studies employed small samples from

New Zealand; the second a small sample from eastern Germany. Some specific predictions are made before the last two studies.

## 2 Study 1

### 2.1 Method

#### 2.1.1 Questionnaire

Respondents were asked to complete a questionnaire on trade. Each questionnaire presented the respondent with eight scenarios about the importation of consumer goods, and asked how they felt about restricting the importation of the goods on a nine-point scale from 1 (Import with no restrictions or tariffs) through 5 (Import some goods with tariffs) to 9 (Allow no goods to be imported at all). This scale is referred to below as the restriction measure. They were also asked whether such imports would benefit the people of your country on the whole, and whether the imports benefit the people of the other country. These two questions were answered on 5-point scales from 1 (Certainly not) through 3 (Not sure) to 5 (Certainly yes).

The eight scenarios varied the two constructs in a 2 X 2 X 2 within-subjects design. The constructs were whether the same goods were produced in New Zealand or not; whether the goods were produced in a country that pays higher or lower wages to its workers than New Zealand; and whether the owners of the businesses made “some but not very large profits” or “very good profits”. In all cases respondents were told that the workers did not own the businesses. When the goods were produced in New Zealand, respondents were also informed: “If people buy the foreign goods a firm in New Zealand will lose business”. For the Goods produced in New Zealand and Higher wage condition, respondents were informed that “this type of [imported] goods is still cheaper and of equally good quality to that produced in New Zealand.”

The order of the eight scenarios was systematically varied, and each scenario was on a separate page. An example of a scenario (produced in New Zealand; higher wages; very good profits) with bold type as on the questionnaire read:

Goods of this type are **produced in New Zealand**. If people buy the foreign goods a firm in New Zealand will lose business.

The goods are produced in a country that pays **higher wages** to its workers than New Zealand, but this type of goods is still cheaper and of equally good quality to that produced in New Zealand.

The workers do not own the businesses. The owners make **very good profits**.

#### 2.1.2 Respondents

The questionnaire was completed by 18 students and 47 non-student members of the general public. The students were recruited during a scheduled class in psychology, the general public by asking a number of paid student interviewers to recruit up to six non-students from people they knew around Christchurch, New Zealand. Overall, 28 respondents were male. The median age of the sample was in the range 25–34 years, and ranged from 15–24 years (27 respondents) to over 65 (2 respondents). For some analyses reported below, respondents were divided into two age groups, 34 or younger (45 respondents) and 35 or older (20 respondents).

### 2.2 Results

Averaged over the eight scenarios, the restriction score (scaled from 1, no restriction, to 9, complete restriction) was 4.44 (SD = 1.48). Two respondents always preferred completely unrestricted trade (all restriction scores were 1), and one always entered 5. The average benefit to one’s own country was 3.37 (SD = 0.64), that to the other country 3.58 (SD = 0.58). (Benefit scores were scaled from 1, certainly not, to 5, certainly yes.)

The key results were tested in three analyses of variance, all featuring a 2 (goods made in NZ versus not made in NZ) by 2 (high or low-wage exporting country) by 2 (very good versus some profits made by the business owners) within-subjects design.

There was greater willingness to restrict imports if that type of good was made in New Zealand (Restriction Average = 5.30) than if it was not (Average = 3.58;  $F(1,61) = 71.5, p < .001$ ). Respondents were keener to restrict imports from low-wage (Average 5.07) than high-wage (Average = 3.81) countries ( $F(1, 61) = 49.1, p < .001$ ). More restriction was preferred when the business owners made very good (Average = 4.79) rather than some profit (Average = 4.09;  $F(1, 61) = 29.9, p < .001$ ). As shown in Table 1, there was a particular preference for restricting imports from low-wage countries when the business owners made very good profits ( $F(1, 61) = 17.1, p < .001$ ). There were no other statistically significant ( $p < .05$ ) interactions.

The difference between the restriction scores for importing from the high and low wage countries was calculated for each pairing of the other factors (e.g., made in New Zealand; some profits) for each respondent. This analysis showed that 16 (of the 65) respondents consistently favoured more restriction on importing from poor countries for all four combinations of the other factors; 3 were consistently indifferent; and none consistently preferred to import from the low-wage country. For the low wage-condition only, a restriction score difference be-

Table 1: Some results from Study 1. Average restriction scores and benefit to the other country ratings for importing from high or low wage countries where the business owners make some or very good profits.

	Low wage	High wage
Restriction scores		
Very good profits	5.62	3.96
Some profits	4.52	3.66
Benefit to the other country		
Very good profits	2.98	3.98
Some profits	3.41	3.96

Note. Restriction scores range from 1 (import with no restrictions or tariffs) to 9 (allow no goods to be imported at all). Benefit to the other country ratings range from 1 (Certainly not) to 5 (Certainly yes).

tween that for very good and some profits was also calculated both for when the goods were made in NZ and when they were not. Thirty respondents gave consistent answers over these two “where made” conditions: 19 respondents advocated more restriction with very good profits, 10 advocated the same amount of restriction, and 1 advocated less restriction with very good profits. Taken together these results show some degree of consistency within the respondents but also a good deal of individual variation that was not related to the manipulated factors.

The rated benefit to one’s own country was significantly greater when the goods were made at home (Average benefit = 3.89) than when they were not (Average = 2.85;  $F(1, 60) = 69.1, p < .001$ ). There were no other statistically significant ( $p < .05$ ) main or interactive effects.

The rated benefit to the other country was slightly but significantly greater when the goods were not made in NZ (Average benefit = 3.65) than when they were (Average benefit = 3.52;  $F(1, 61) = 4.23, p = .044$ ). The rated benefit was also higher when the wages were high (Average = 3.97) rather than low (Average = 3.19;  $F(1, 61) = 41.7, p < .001$ ) and when some (Average = 3.69) rather than very good (Average = 3.48) profits were made by the business owners ( $F(1, 61) = 9.1, p = .004$ ). As shown in Table 1, the effects of profit were stronger when importing from the low-wage country ( $F(1, 61) = 16.1, p < .001$ ). The benefit to the other country was seen as particularly low when the other country’s business owners made very good profits but paid low wages, a result mirroring that found for the restriction preference.

Analyses of variance were also conducted with three background variables: sample, respondent sex and respondent age (dichotomised as younger or older). Because these three variables intercorrelate, the analyses re-

ported above were repeated firstly with the addition of the sample factor only, secondly with the addition of the sex factor only, and finally with the addition of the age factor only. These nine extra analyses uncovered a total of three statistically significant effects of the background variables or their interactions with the scenario variables.<sup>1</sup> Crucially, there were no statistically significant interactions of the background variables with the results reported earlier, showing that these findings are not moderated by these background variables.

### 3 Study 2

It may be questioned whether the results of Study 1 hold outside New Zealand. Study 2 was a replication of Study 1 carried out in eastern Germany. The area was chosen partly for reasons of convenience, but also because there are several important social and economic differences to New Zealand. Firstly, up until 1990, it was a separate country with a planned, socialist economy. Secondly, unlike New Zealand, it currently forms part of a major world trading block (the European Union). Thirdly, at the time of conducting Study 1, the official unemployment rate in both New Zealand and the Christchurch area was well under 5 percent. By contrast, at the time of Study 2, the unemployment rate throughout the eastern states of Germany was around 15 percent. An obvious expectation was that the higher unemployment rate might lead people to be more protectionist.

#### 3.1 Method

The questionnaire and recruitment methods were generally as similar as possible to those used in Study 1. The questionnaire from that study was translated into German by a native German speaker and then checked against the original version by a native speaker of English who spoke fluent German. As in the previous experiment, the sample contained a mixture of students and the general public. A requirement for both students and general public was that they were east German. Both the students and the general publics were recruited by paid interviewers, whose instructions were translations of those given to the New Zealand interviewers of Study 1. The final sample contained 25 student and 50 general public respondents.

<sup>1</sup>When sample was added, there was a three way interactive effect of where the goods were made, the level of profit and the sample on the perceived benefit to the other country ( $F(1, 60) = 4.51, p = .038$ ), with the students showing a more pronounced interactive effect than the general public. Women were overall more willing to restrict imports (Average = 4.83) than men (Average = 3.89;  $F(1, 60) = 6.62, p = .013$ ). There was a significant interactive effect of age and where the goods were made, with older people seeing less benefit to New Zealand of importing goods when similar were made at home ( $F(1, 59) = 4.54, p = .037$ ).

There were 35 male and 40 female respondents. Overall, the median age was in the band 35–44 years with a range from under 25 to over 65 years of age. Thirty-four respondents were aged 34 or younger, 41 were 35 or older.

### 3.2 Results

Over the eight scenarios, the restriction score averaged 4.70 (SD = 1.74). Four respondents always entered the same restriction score of 1. Rated benefit to one’s own country averaged 3.35 (SD = 0.89), that to the other country 3.91 (SD = 0.80).

There was greater willingness to restrict goods if that type was made in Germany (Average = 5.52) than if it was not (Average = 3.87;  $F(1,72) = 55.3, p < .001$ ). Respondents more concerned to restrict imports where the owners made very good (Average = 4.97) rather than some profits (Average = 4.43;  $F(1, 72) = 11.42, p = .001$ ). As shown in Table 2, there was a particular reluctance to import from low-wage countries when the business owners made very good profits, a similar result to Study 1 ( $F(1, 72) = 11.1, p = .001$ ). Table 2 also illustrates that, perhaps surprisingly, respondents were more sensitive to profits when similar goods were not made locally than when they were ( $F(1, 72) = 9.2, p = .003$ ). There were no other statistically significant ( $p < .05$ ) interactions, and the main effect of wages was also not significant.

The difference between the restriction scores for importing from the high and low wage countries again was calculated for each pairing of the other factors and each respondent. Three (of the 75) respondents consistently favoured more restriction on importing from poor countries for all four combinations of the other factors; 8 were consistently indifferent; and 4 consistently preferred to import from the low-wage country. As for Study 1, for the low wage-condition only, a restriction score difference between very good and some profits was calculated for both the made in Germany and not made in Germany conditions. Forty-four respondents answered consistently over the two conditions: 23 respondents advocated more restriction with very good profits, 60 favored the same amount of restriction, and 5 favored less restriction with very good profits. Again, the results indicate some consistency within the respondents, but a number of respondents displayed idiosyncratic interaction effects.

The rated benefit to one’s own country was significantly greater when the goods were not made at home (Average benefit = 3.83) than when they were (Average = 2.88;  $F(1, 60) = 69.1, p < .001$ ). There was also more benefit perceived when the goods were made in a high (Average benefit = 3.45) than in a low wage country (Average benefit = 3.26;  $F(1, 73) = 4.38, p = .040$ ). Finally, the benefit to us was perceived as particularly low when the imports come from a low wage country where the

Table 2: Some results from Study 2. Average restriction scores and benefit to one’s own country ratings for importing from countries where the business owners make some or very good profits, as a function of the wage levels in the other country and (restriction scores only) whether the goods were made in Germany or not.

Owner profits:	Very good	Some
Restriction scores		
High wages	4.72	4.55
Low wages	5.21	4.31
Made in Germany	5.62	5.42
Not made in Germany	4.31	3.44
Benefit to one’s own country		
High wages	3.49	3.41
Low wages	3.13	3.39

Note. Restriction scores range from 1 (import with no restrictions or tariffs) to 9 (allow no goods to be imported at all). Benefit to one’s own country ratings range from 1 (Certainly not) to 5 (Certainly yes).

business owners make very good profits (see Table 2;  $F(1, 73) = 6.42, p = .013$ ).

The perceived benefit to the other country was significantly greater when the goods were not made in Germany (Average benefit = 4.03) than when they were (Average benefit = 3.79;  $F(1, 73) = 12.2, p = .001$ ). Again, the benefit was perceived to be higher when the wages were high (Average = 4.05) than when they were low (Average = 3.77;  $F(1, 73) = 8.3, p = .005$ ). However, there was no significant main effect of profit level, and nor were there any statistically significant ( $p < .05$ ) interactions.

As for Study 1, these analyses were repeated with the successive addition of sample, sex and age factors. None of these factors nor their interactions produced any significant ( $p < .05$ ) results on the restriction measure or on the benefit to one’s own country ratings, but there were some significant effects on the ratings of benefit to the other country. Students saw higher levels of profit as more beneficial to the other country than the general public ( $F(1, 72) = 7.29, p = .009$ ). Younger people also saw relatively more benefit to the other country when higher profits were made by the foreign business owners ( $F(1, 72) = 8.50, p = .005$ ). Both these effects are consistent with other research indicating a more pro-profit, pro-capitalist attitude amongst younger rather than older east Germans (Landier et al., 2008). Finally, there was a significant tendency for older rather than younger respondents to see more benefit for the other country when the goods are not made in the home country ( $F(1, 72) = 5.20, p = .026$ ).

Again, the background variables did not interact with the findings that were the main focus of the study.

Some results were compared directly with those from Study 1. Analysis of variance on the combined restriction scores with country of sample, whether the goods were made in the home country, the wage level of the exporting country and the profits made by the owners as independent variables showed no significant ( $p < .05$ ) main effect of country of sample or of the interaction of the country with any of the other independent variables, except for wage level ( $F(1, 133) = 26.0, p < .001$ ). The New Zealand sample was relatively more unwilling to import from a low-wage country. Note especially the lack of interaction with whether the goods were made in the home country or not. The relatively higher east German unemployment level did not lead to respondents from that region being especially reluctant to import goods similar to those made at home.

## 4 Study 3

Earlier work (Baron & Kemp, 2004) found that people who wanted to restrict imports also tended to have lower understanding of Ricardo's principle of comparative advantage. However, this earlier research did not investigate whether understanding of the principle is related to particular unwillingness to import from low-wage countries. Two specific predictions are investigated here. Firstly, if misunderstanding of the principle is related to a particular reluctance to import from low-wage countries, one would expect that the negative correlation between restriction scores and understanding of the principle found in this earlier research would be moderated by the wage level of the country supplying the imports: There should be a stronger negative correlation when low-wage rather than high-wage countries are under consideration. Secondly, one would expect individuals who are particularly keen to restrict imports from low-wage countries to have a more limited understanding of the principle.

### 4.1 Method

#### 4.1.1 Questionnaire

Respondents completed a questionnaire consisting of two major parts. The first part was a cut-down version of the questionnaire used in Study 1. The restriction measure was the sole dependent variable and only four scenarios were presented, which varied whether similar goods were made in New Zealand or not and whether the goods were imported from a country paying lower or higher wages.

In the second part of the questionnaire respondents were tested on their understanding of the principle of comparative advantage. This test contained four of the

eight items used by Baron and Kemp (2004). All the items confronted the respondent with a decision about the efficient allocation of production of units that had two components: a computer made up of a processor and peripherals or a motorcycle with frame and engine. In this experiment, the two components of the motorcycle were made by different branches of a firm in one country; the components of the computer were made in different countries. There was a hard and an easy version of each scenario. An example is given below:

"Two branches of a firm, both within one country, make parts for a motorbike. Branch **A** can make engines at a cost of \$100 each and frames at a cost of \$80 each. Branch **B** can make engines at a cost of **\$180** each [the easy version had \$80 each] and frames at a cost of \$100 each. A third branch puts the engines and frames together.

"Each branch has a limited number of skilled workers and no possibility of recruiting more. Nor can the workers be moved between the branches. However, workers can easily transfer from making engines to frames or vice versa. The motorbikes sell well. "At present, A and B make equal numbers of motorbikes, and each branch makes an equal number of frames and engines.

"Think about how you allocate work to get the most efficient production."

Respondents then allocated production of both frames and engines on the (separate) scales: All to Branch A; Most to Branch A, the rest to Branch B; Equal to both; Most to Branch B, the rest to Branch A; All to Branch B.

As in Baron and Kemp (2004), each item was scored so that allocating all the production of one component to the producer with greatest comparative advantage scored one point, "most" received half a point, equal allocation received 0 points, allocation of "most" to the other producer lost half a point, and allocation of all to the other a full point. The final total scores could thus range between +8 and -8. (Recall that there are two components for each question.)

#### 4.1.2 Respondents

Sixty-eight non-student members of the New Zealand general public, 28 of them male, completed questionnaires. Thirty-six respondents were between 15 and 24 years old, 14 between 25 and 34, 3 between 35 and 44, 10 between 45 and 54, 3 between 55 and 64, and the remainder were 65 or over. They were recruited by paid student assistants using similar procedures to the previous experiments.

## 4.2 Results

Analysis of the restriction scores showed greater reluctance to import from the low than the high wage country (Average Low wage rating = 5.2; Average High wage rating = 4.2;  $F(1,65) = 19.7, p < .001$ ). Similarly the respondents were significantly more reluctant to import when the goods were made in New Zealand (Average Rating made in NZ = 5.6; Average Rating not made in NZ = 3.8;  $F(1, 65) = 57.3, p < .001$ ). There was no significant interaction between the two factors ( $F(1, 65) = .70, ns$ ). Essentially, these results replicate those found for the same factors in Study 1. Taken over the four scenarios, the restriction score averaged 4.7 (SD = 1.6).

Three respondents had a constant restriction score of 1, and one always recorded a score of 5. Twenty-seven respondents favored more restriction when importing from low-wage countries for both levels of the made in NZ factor; 10 were consistently indifferent, and 7 favored more restriction when importing from high wage countries. There was a significant tendency for those who favored more restriction on low-wage imports (as opposed to indifference or less restriction) when goods were made in NZ to also favor more restriction of low-wage imports when they were not made in New Zealand ( $\chi^2[df=1] = 19.0, p < .001$ ). A similar result ( $\chi^2[df=1] = 16.8, p < .001$ ) was found for those favoring less restriction on low-wage imports (as opposed to either indifference or more restriction). These analyses suggest the existence of a group of people who are particularly sympathetic to importing from low-wage countries, and a group of people who are opposed to such imports.

The Comparative Advantage Test score average was 3.0 (SD = 1.6; range -6 to 8). This average implies that Ricardo's principle was generally not well understood by the sample. Effectively the score can be interpreted as implying that the average respondent often chose to make the component where there was an absolute advantage or tried to distribute production equally, but did not often choose to follow the logic of comparative advantage. (Similar levels of understanding were reported by Baron and Kemp, 2004.) Those with more understanding of the principle tended to be more in favour of importing generally (Pearson  $r$  between restriction and Comparative Advantage Test = -0.34,  $p < .05$ ) a result that again replicates a similar finding by Baron and Kemp (2004).

The key question for the present study is whether lack of understanding of the principle of comparative advantage explains why many people are particularly reluctant to import from low wage countries. People's reluctance to import from low wage countries (i.e. averaging the rating over the two low wage scenarios) Pearson correlated -0.29 ( $p < .05$ ) with the Comparative Advantage Test score. However, the equivalent correlation with peo-

ple's reluctance to import from high wage countries was -0.30 ( $p < .05$ ). Thus, similar correlations were obtained regardless of whether importing from low or high wage countries was in question.

The second analysis first assessed each individual's differential reluctance to import from low versus high wage countries (i.e. rating of reluctance to import from low wage countries minus rating of reluctance to import from high wage countries). This variable was then in turn correlated with the Comparative Advantage Test scores, but the result was found not to be statistically significant ( $r = -.05$ ). Taken together, these two analyses indicate that greater reluctance to import from low wage countries is not simply explained by the respondents' frequent misunderstanding of the principle of comparative advantage.

## General discussion

The New Zealand studies (1 and 3) found respondents were overall more willing to restrict imports from low than from high wage countries. These findings taken together with the interactive effect of wage and profit level found with the German sample of Study 2, shows that, indeed, people are sometimes keener to restrict imports from lower than from high wage countries.

All three studies found the respondents to be more willing to restrict imports when similar goods are made in one's own country, and, unsurprisingly, there was greater perceived benefit to one's own country when no similar goods are made at home. Moreover, as the differences between the means show, the effect of whether similar goods are made at home on the restriction measure is large. However, all three studies indicate that willingness to restrict goods that might cause a home country firm to lose business is not particularly related to whether the goods come from a low or a high-wage source. If this were the case we would have obtained interactions between the effects of source country wage and whether the goods are made at home. Not one study showed such an interaction, and the conclusion is thus that the two variables have independent effects. Thus, the reason for particular reluctance to import from low-wage countries should be sought elsewhere.

Previous research has shown a low level of lay understanding of the principle of comparative advantage, and that lower levels of understanding are associated with greater protectionism (Baron & Kemp, 2004; Krugman, 1994). These results were also found here. However, Study 3 goes beyond this previous work by showing that lower levels of misunderstanding are not associated with a particular reluctance to import from low-wage countries. Thus, this reluctance is not caused by misunderstanding of the principle.

A number of results indicate that people do not wish to support exploitation in foreign countries, and that this resistance to foreign exploitation is connected with greater reluctance to import from low-wage countries. In Studies 1 and 2, the respondents, whether Germans or New Zealanders, favoured more restriction when the foreign business owners made very good rather than some profits. The studies also produced significant interactions of the effects of wages and profits: Both New Zealand and German respondents were particularly reluctant to import from low-wage sources when the business owners made very good profits. The implication is that reluctance to import from low-wage countries is influenced by people's perceptions of exploitation in such countries.

At least for the New Zealand respondents of Study 1, the perceived benefit to one's own country is affected by whether similar goods are made in one's own country, while perceived benefits to the other country are mainly affected by the other country's wage and profit levels. However, restriction scores were often affected by all three variables. Putting together these results suggests that people's willingness to restrict imports depends not only on what is perceived as good for one's own country but also on what is perceived as good for the foreign country. Thus, attitudes to importing have at least some component of international altruism, although whether this international altruism is reasonably based is very questionable. In many cases workers in low-wage countries may not have better alternatives.

Perhaps the most interesting finding from the research — that there is particular reluctance to import from low-wage countries when the business owners make very good profits — was found for both the New Zealand and the German samples. However, the other results are somewhat different. There are several possible explanations for the differences. Germany has a different trading pattern to New Zealand, and imports from different low-wage countries with different conditions. The results from the German sample also indicate differences among east Germans according to their experience of the former communist regime.

The background variables investigated here (student versus non-student, age and sex) did not moderate either the non-interaction between whether similar goods were made at home and foreign wage levels or the interaction between foreign wage and profit levels. However, it is possible that other variables might, or that the findings will not hold in all countries.

The results of the present studies feature a good deal of individual variation. Not only did all the studies feature large standard deviations in the restriction and other measures, but also every study contained a few respondents who supported unrestricted importation over all the different scenarios, as does the majority of professional

economists (e.g., Alston et al., 1992; Frey et al., 1984). It is also worth noting that not all respondents preferred to import from high-wage countries. In Studies 1 and 2, only a few respondents consistently favoured imports from high over low wage countries or vice versa over all four combinations of the other scenario variables. Indeed, in Study 3 a few respondents displayed a consistent preference for importing from low-wage countries. Perhaps, as suggested in the introduction, a few people did believe that workers in poor countries had more need to sell their products abroad. In Studies 1 and 2 a number of respondents in the low-wage conditions did not consistently favour more restriction from one or other of the profit conditions over the two "where made" conditions, although there was a general tendency to restrict more from countries where the owners made very good profits. The overall lack of consistency may be a consequence of the respondents not always entering the study with well thought out views about trade, and thinking through some of the issues while actually completing the questionnaire.

It is also likely that when people think about importing from low-wage countries they consider a variety of factors beyond those investigated here, for example, environmental concern or unwillingness to support oppressive foreign governments. The wording of the scenarios attempted to exclude one such factor — differences in quality of the goods — but it is possible that this factor, as well as the others, still played some role in the respondents' thinking. On the other hand, it is not easy to see how such factors could have affected the crucial results found here, such as the interactive effect of profits and wages.

Taking a broad view, the present results show that the attitudes of ordinary people towards trade policy are not solely determined by their own personal profit and loss, or even solely by the profits and losses of their compatriots. Their views are also influenced by their perceptions of conditions in foreign countries. Specifically, the present results suggest that ordinary people are often resistant to importing goods from foreign businesses whose owners make very good profits, and that this resistance is particularly strong when the businesses are located in low-wage countries.

Lay opinions are not generally decisive in determining government trade policies, but they do influence them (e.g., Davidson et al., 2006; Kemp, 2007). Indeed, their resistance may be an important obstacle to liberalising trade generally and with low-wage countries in particular. The results presented here suggest that overcoming such resistance may not always be best done by appealing to people's self-interest. Practically, the research shows that people's resistance can be appreciably reduced if they are assured that the owners of the businesses in the low-wage countries make some rather than very large prof-



its. However, giving such an assurance may not always be straightforward: In fact, investors in low-wage countries often do require a higher rate of return because such countries are perceived as riskier and less creditworthy (e.g., Depken et al., 2007; Ul Haque et al., 1998). Thus, the application of the present research is not completely straightforward.

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