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AZERBAIJAN COMPETITIVENESS AND TRADE (ACT) PROJECT

*Assessing the Impact of the Elimination of Export
Duties on Revenue and Production in Azerbaijan: A
Product-by-Product Approach*

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Azerbaijan Competitiveness and Trade (ACT) Project

Assessing the Impact of the Elimination of Export Duties on Revenue and Production in Azerbaijan: A Product-by-Product Approach

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The author's views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the United States Government.

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Executive Summary

This report provides an assessment of the impact of eliminating export duties on revenue and domestic producers in Azerbaijan. In Azerbaijan, export bans and export duties are mainly used to provide cheaper input to certain producers. Shifting away from this practice will improve Azerbaijan's economic efficiency, transparency, and the likelihood of its membership in the World Trade Organization (WTO).

While the WTO does not ban export taxes, these taxes must be nondiscriminatory and transparent. The WTO, however, encourages its potential members to avoid quantitative restrictions, e.g., a decree that suspends the export of metal scraps, and/or transforming these to price-based instruments. In practice, the WTO members consider export bans and export duties as forms of subsidies to the domestic industries. International trade theory provides the rationale for shifting away from export bans and, in a majority of cases, from export duties. Similarly, the world trade laws support abolishing quantitative restrictions that hinder trade and lower welfare. Beneficial impacts of eliminating export bans and export duties are clearly demonstrated by the economic theory and international evidence.

- Azerbaijan imposes export duties on a number of basic metals. Additionally, Azerbaijan has (temporarily) suspended the export of *ferrous and non-ferrous metal scraps and wastes* since April 17, 2001.
- Azerbaijan export duties are mainly used to provide cheaper input to certain produce. Historically, quantitative restrictions on trade were imposed with the desire to curb asset stripping (creating scrap metals) and export.
- Export bans and export duties usually have unintended consequences in the short-run and/or in the long-run. In particular, export duties reduce the incentive to use more efficient technologies.
- Economic trade theory and analysis point to the distortionary (lower welfare and efficiency) aspect of restricting trade by imposing ban on export duty.
- If Azerbaijan does not dominate a particular international market, then it will not benefit from imposing export duty on any of its products. Azerbaijan has (temporarily) suspended the export of ferrous and non-ferrous metal scraps and wastes since 2001. Azerbaijan has also levied between \$5-\$15 export duty on certain categories of ferrous/iron, copper, aluminum, lead, and zinc.

- Using a wide range of short-run and the long-run export price elasticity estimates for Azerbaijan, we find that the positive impact of eliminating export duties will take place in the long-run.
- Eliminating export duties on basic metals will not lead to any significant increase in the export of these commodities in the short-run.
- The long-run export price elasticities support a 0.5% - 8% increase in exports for the basic metals. Apart from zinc, the increase in the exports of basic metals in the long-run will be less than 5%. Hence, one may conclude that the impact of eliminating export duties on the basic metal producers and the economy (including those using basic metals as input), at best, will be fairly modest.
- Given that the basic metal industry is more labor-intensive than the fabricated metal industry, elimination of export ban and export duties will improve the net employment in Azerbaijan.
- Since the average wage in the basic metal industry is 1.7 times the average wage in the fabricated metal industry, elimination of export ban and export duties will lead to higher income, higher income tax collection, and higher consumption (welfare) in Azerbaijan.
- A revenue impact assessment shows that eliminating export duties will have no appreciable revenue impact. In particular, the revenue loss (due to elimination of export duties) may not exceed \$43 thousand.
- Analysis also shows that elimination of export duties on scrap metals will lead to small price increases for the users of these metals as input. In particular, the growth rate of prices of iron (2%), copper (0.3%), aluminum (2%-3%), lead (0.7%), and zinc (5%) will be confined to 0.3% - 5%.
- Analysis shows that imported basic metals will not pose a serious challenge to the domestically produced basic metals in Azerbaijan. For example, under very strict conditions, which have fairly low probability of occurrence, the import of ferrous/iron could fluctuate between almost 4%-7%. As long as imports are imperfect substitutes for the domestically produced basic metals and there are significant transportation costs for cross-border trade of basic metals, fabricated metal manufacturers in Azerbaijan will find the domestically produced basic metals to be cheaper than the foreign basic metals.
- A case study of available data and information on a major fabricated metal manufacturer reinforces the above findings. This case study also shows that users of basic metals are highly profitable and that their profitability is robust to changes in the parameters that represent their cost structure.

- A byproduct of removing trade barriers is the inflow of foreign direct investment. In addition to improved efficiency, higher employment, higher average income, higher transparency, and improved welfare, elimination of export duty may lead to significant internal as well as foreign direct investment in Azerbaijan's manufacturing sector.
- Given the high opportunity costs in maintaining quantitative restriction (Decree 457) and various duties on the export of basic metals, Azerbaijan is well advised to remove these barriers to trade as soon as possible.

Introduction

This report provides an assessment of the impact of eliminating export duties on revenue and domestic producers in Azerbaijan. Export duties are usually imposed on raw materials and agricultural products. In addition to raising revenues, export duties are used for social and industrial policies as well. For example, export duties may promote downstream industries in the country and/or allow governments to lower the input prices for certain industries that employ a large number of individuals. Export duties usually have unintended consequences in the short-run and/or in the long-run. In particular, export duties reduce the incentive to use more efficient technologies. In Azerbaijan, export duties are mainly used to provide cheaper input to certain producers.

While the World Trade Organization (WTO) does not ban export taxes, these taxes must be nondiscriminatory and transparent.¹ The WTO members usually consider export bans and export duties as forms of subsidies to the domestic industries.² The WTO strongly encourages its potential members to shift away from export prohibition (e.g., the Presidential ban on export of metals). Beneficial impacts of eliminating export bans and export duties are strongly supported by economic theories and empirical evidence in international trade.³

1 See, Articles I and X of the GATT.

2 It is worth noting that, the United States regional agreements (NAFTA, CAFTA) prohibit export taxes.

3 Abba Lerner (1936) showed that, in a balanced trade, the impact of an ad valorem import tariff is identical to an ad valorem export tax. This implies that exportables can be subsidized by subsidizing importable. In other words, an import-competing sector can be protected by either an export duty or an import duty. This has facilitated analysis of export taxation in international trade analysis,

Imposing an export duty is beneficial only under a very restrictive condition. When a country dominates the world export market for a product, then levying an export tax could benefit the exporting country by shifting the tax burden onto the importing countries. Similarly, if the world demand for a good is highly inelastic, then the exporting country could benefit if it raises the price of the product through an export tax. Given these strict conditions, only a limited number of countries engage in imposing export tax, export duties, export ban, export licensing, and other nontax measures.⁴ This report provides a quantitative assessment of the impact of eliminating export duties and export bans on Azerbaijan’s government revenue and domestic producers.

Azerbaijan imposes export duties on a number of basic metals.⁵ Additionally, Azerbaijan has (temporarily) suspended the export of *ferrous and non-ferrous metal scraps and wastes* on April 17, 2001.⁶ Table 1 presents the list of goods subject to export duties during exportation from Azerbaijan. This list shows that basic metals are the main target for export duties in Azerbaijan. The export duty list shows that the duties for aluminum, lead, zinc, and tin are set at \$15 per ton, and those for iron and ferrous alloys are set at \$5-\$7 per ton. While the duties on iron and ferrous alloys are reported to be \$5 - \$7 per ton in Table 1, the 2001 Presidential Decree number 457 effectively bans the export of these metals.

Table 1: Goods Subject to Export Duties

| Code | Name of goods | Additional measurement unit | Rate of export duty (in US dollars) |
|------------------|---|-----------------------------|-------------------------------------|
| | Primary materials; products in granular or powder form | | |
| 7201 | Pig iron and spiegeleisen in pigs, blocks or other primary forms: | | |
| 720110 | - non-alloy pig iron containing by weight 0.5% or less of phosphorus: | | |
| | -- containing by weight not less than 0.4% of manganese: | | |
| 720110110 | --- containing by weight 1% or less of silicon | kg | 1000 kg, 5 USD |

4 Nonetheless, Piermartini (2004) indicates that, petroleum, minerals, metals, forestry products, leather/hide/skins, tobacco, grain, nuts, oilseed products, sugar, coffee, cocoa, banana, and fishery products have been target of export taxation. It must be noted that, in every case, either the demand is inelastic and/or the exporting country has a significant share of the export market.

⁵ Export duties, export taxes, export tariffs, export fees, export levies, export charges, and customs duties on exports, are generally considered as synonymous; for example, see Jan Kazeki’s (2006) study entitled, “OECD Trade Policy Studies Looking Beyond Tariffs: The Role of Non-Tariff Barriers in World Trade,” no. 1, OECD.

⁶ See the APPENDIX I for the Presidential Decree number 457, which was issued on April 17, 2001.

| | | | |
|----------------------|---|----|----------------|
| 720110190 | --- containing by weight more than 1% of silicon | kg | 1000 kg, 5 USD |
| 720110300 | -- containing by weight not less than 0.1% but less than 0.4% of manganese | kg | 1000 kg, 5 USD |
| 720110900 | -- containing by weight less than 0.1% of manganese | kg | 1000 kg, 5 USD |
| 720120000 | - non-alloy pig iron containing by weight more than 0.5% of phosphorus | kg | 1000 kg, 5 USD |
| 720150 | - alloy pig iron; spiegeleisen: | kg | 1000 kg, 5 USD |
| 720150100 | -- pig iron, containing by weight not less than 0.3% but not more than 1% of titanium and not less than 0.5% but not more than 1% of vanadium | kg | 1000 kg, 5 USD |
| 720150900 | ---other | kg | 1000 kg, 5 USD |
| 7202 | Ferroalloys: | | |
| | - ferro-manganese: | | |
| 7200211 | -- containing by weight more than 2% of carbon: | | |
| 720211200 | --- with a granulometry not exceeding 5 mm and a manganese content by weight exceeding 65% | kg | 1000 kg, 5 USD |
| 720211800 | --other | kg | 1000 kg, 5 USD |
| 720219000 | --other | kg | 1000 kg, 5 USD |
| | - ferrosilicon: | | |
| 720221 | -- containing by weight more than 55% of silicon: | | |
| 720221100 | --- containing by weight more than 55% but not more than 80% of silicon | kg | 1000 kg, 5 USD |
| 720221900 | --- containing by weight more than 80% of silicon | kg | 1000 kg, 5 USD |
| 720229000 | --other | kg | 1000 kg, 5 USD |
| 7202300 | - ferrosilico manganese | kg | 1000 kg, 5 USD |
| | - ferro-chromium: | kg | 1000 kg, 5 USD |
| 720241 | -- containing by weight more than 4% of carbon: | kg | 1000 kg, 5 USD |
| 7202 41 100 0 | --- containing by weight more than 4% but not more than 6% of carbon | kg | 1000 kg, 5 USD |
| 720241910 | ---- containing by weight not more than 60% of chromium | kg | 1000 kg, 5 USD |
| 720241990 | ---- containing by weight more than 60% of chromium | kg | 1000 kg, 5 USD |

| | | | |
|------------------|---|----|----------------|
| 720249 | --other | kg | 1000 kg, 5 USD |
| 720249100 | --- containing by weight not more than 0.05% of carbon | kg | 1000 kg, 5 USD |
| 720249500 | --- containing by weight more than 0.05% but not more than 0.5% of carbon | kg | 1000 kg, 5 USD |
| 720249900 | --- containing by weight more than 0.5% but not more than 4% of carbon | kg | 1000 kg, 5 USD |
| 720250000 | - ferrosilicochromium | kg | 1000 kg, 5 USD |
| 720260000 | - ferronickel | kg | 1000 kg, 5 USD |
| 720270000 | - ferromolybdenum | kg | 1000 kg, 5 USD |
| 720280000 | - ferrotungsten and ferrosilicotungsten | kg | 1000 kg, 5 USD |
| | -other: | kg | 1000 kg, 5 USD |
| 720291000 | -- ferrotitanium and ferrosilicotitanium | kg | 1000 kg, 5 USD |
| 720292000 | -- ferrovanadium | kg | 1000 kg, 5 USD |
| 720293000 | -- ferroniobium | kg | 1000 kg, 5 USD |
| 720299 | --other: | kg | 1000 kg, 5 USD |
| | --- ferro-phosphorus: | kg | 1000 kg, 5 USD |
| 720299110 | ---- containing by weight more than 3% but less than 15 % of phosphorus | kg | 1000 kg, 5 USD |
| 720299190 | ---- containing by weight 15% or more of phosphorus | kg | 1000 kg, 5 USD |
| 720299300 | --- ferrosilicomagnesium | kg | 1000 kg, 5 USD |
| 720299800 | --- other | kg | 1000 kg, 5 USD |
| 7203 | Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or similar forms; iron having a minimum purity by weight of 99.94 percent, in lumps, pellets or similar forms: | | |
| 720310000 | - ferrous products obtained by direct reduction of iron ore | kg | 1000 kg, 5 USD |
| 720390000 | -other | kg | 1000 kg, 5 USD |
| 7204 | Ferrous waste and scrap; remelting scrap ingots of iron or steel: | | |
| 720410000 | - waste and scrap of cast iron | kg | 1000 kg, 7 USD |
| | - waste and scrap of alloy steel: | kg | 1000 kg, 7 USD |
| 720421 | -- of stainless steel: | kg | 1000 kg, 7 USD |
| 720421100 | --- containing by weight 8% or more of nickel | kg | 1000 kg, 7 USD |

| | | | |
|------------------|---|----|-----------------|
| 720421900 | --- other | kg | 1000 kg, 7 USD |
| 720429000 | -- other | kg | 1000 kg, 7 USD |
| 720430000 | - waste and scrap of tinned iron or steel | kg | 1000 kg, 7 USD |
| | - other waste and scrap: | | |
| 720441 | --- turnings, shavings, chips, milling waste, Sawdust, filings, trimmings and stampings whether or not in bundles (ecsc): | | |
| 720441100 | --- turnings, shavings, chips, milling waste, sawdust and filings | kg | 1000 kg, 5 USD |
| | --- trimmings and stampings: | | |
| 720441910 | ---- in bundles | kg | 1000 kg, 5 USD |
| 720441990 | ----other | kg | 1000 kg, 5 USD |
| 720449 | --other | kg | 1000 kg, 5 USD |
| 720449100 | --- fragmentized (shredded) | kg | 1000 kg, 5 USD |
| | ---other: | | |
| 720449300 | ---- in bundles | kg | 1000 kg, 5 USD |
| | ---- other: | | |
| 720449910 | ----- neither sorted nor graded | kg | 1000 kg, 5 USD |
| 720449990 | ----other | kg | 1000 kg, 5 USD |
| 720450 | - remelting scrap ingots (alloys): | kg | 1000 kg, 5 USD |
| 720450100 | -- of alloy steel | kg | 1000 kg, 5 USD |
| 720450900 | --other | kg | 1000 kg, 5 USD |
| 7205 | Granules and powders, of pig iron, spiegeleisen, iron or steel: | | |
| 720510000 | - granules | kg | 1000 kg, 5 USD |
| | - powders: | | |
| 720521000 | -- of alloy steel | kg | 1000 kg, 5 USD |
| 720529000 | --other | kg | 1000 kg, 5 USD |
| 720610000 | - ingots | kg | 1000 kg, 5 USD |
| Group 74 | Copper and articles thereof | kg | 1000 kg, 15 USD |
| 7601 | Unwrought aluminum: | | |
| 760110000 | - aluminum, not alloyed | kg | 1000 kg, 15 USD |
| 760120 | - aluminum alloys: | | |
| 760120100 | -- primary | kg | 1000 kg, 15 USD |
| | -- secondary | | |
| 760120910 | --- in ingots or liquid state | kg | 1000 kg, 15 USD |
| 760120990 | --other | kg | 1000 kg, 15 USD |
| 760200 | Aluminum waste and scrap: | | |
| | - wastes: | | |

| | | | |
|------------------|---|----|-----------------|
| 760200110 | -- turnings, shavings, chips, milling waste, sawdust and filings, waste of colored, coated or bonded sheets and foil, of a thickness (excluding any backing) not exceeding 0.2 mm | kg | 1000 kg, 15 USD |
| 760200190 | -- other (including factory rejects) | kg | 1000 kg, 15 USD |
| 760200900 | -scrap | kg | 1000 kg, 15 USD |
| 7603 | Aluminum powders and flakes: | kg | 1000 kg, 15 USD |
| 760310000 | - powders of non-lamellar structure | kg | 1000 kg, 15 USD |
| 760320000 | - powders of lamellar structure; flakes | kg | 1000 kg, 15 USD |
| Group 78 | - Lead and articles thereof | kg | 1000 kg, 15 USD |
| Group 79 | - Zinc and articles thereof | kg | 1000 kg, 15 USD |
| Group 80 | - Tin and articles thereof | kg | 1000 kg, 15 USD |

Export Duties and Their Rationales

Table 2 provides the structure of exports of metals for the last few years. Some of these metals (e.g., sub-groups under HS Code 72) are subject to export duty and/or export ban. For example, only \$70,000 of exported iron related products are subject to the \$5 per ton export duties. Various arguments are used to defend the existence of export duties and or export bans. A survey of these arguments (below) indicates that the usual economic rationale and welfare maximization do not support the existence of the current export duties and/or export bans.

Table 2: Structure of Export of Base Metals and Articles of Base Metal

| HS Code (Two Digits) | Base metals and articles of base metal (thousands of \$) | 2007 | 2008 | 2009 | 2010 |
|-----------------------------|---|-------------|-------------|-------------|-------------|
| 72 | Iron and steel | 44,743.9 | 49,898.5 | 20,046.4 | 76,989.8 |
| 73 | Articles of iron and steel | 32,036.9 | 181,456.7 | 83,363.5 | 35,193.0 |
| 74 | Copper and articles thereof | 11,977.0 | 8,292.8 | 3,844.8 | 8,764.8 |
| 75 | Nickel and articles thereof | - | - | - | - |
| 76 | Aluminum and articles thereof | 91,704.1 | 122,266.4 | 12,046.5 | 2,683.9 |
| 78 | Lead and articles thereof | 673.4 | 725.2 | 951.8 | 2,032.9 |
| 79 | Zinc and articles thereof | - | 32.2 | 12.0 | 273.7 |

| | | | | | |
|----|---|-------|-------|-------|-------|
| 82 | Tools, implements, cutlery, spoons and forks, of base metal | 293.2 | 601.5 | 748.6 | 171.4 |
| 83 | Miscellaneous articles of base metal | 296.1 | 283.1 | 188.3 | 111.9 |

Source: State Statistical Committee

Raising Revenue

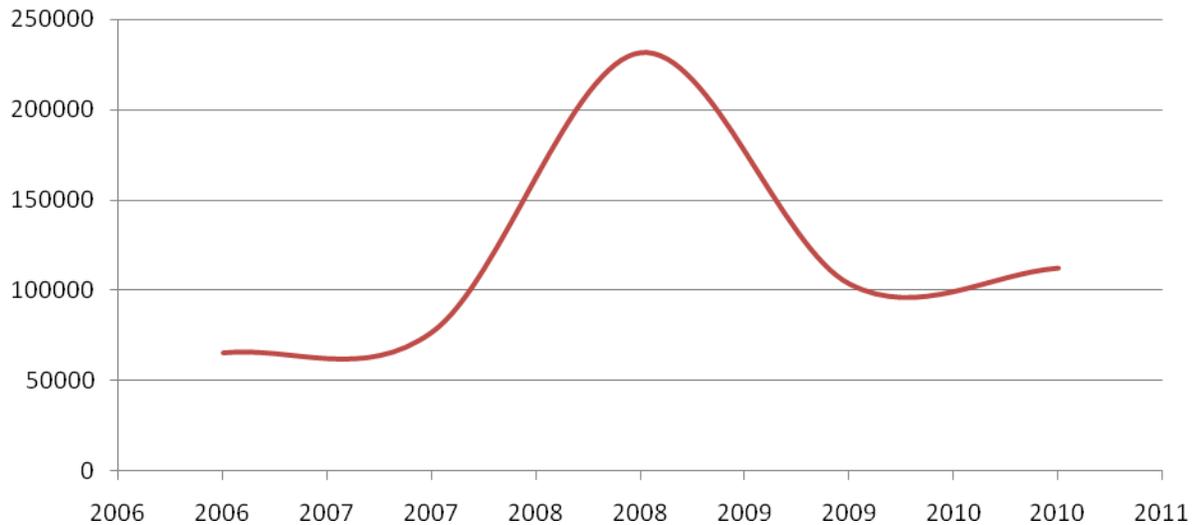
Export duties provide the governments with the opportunity to raise revenue while pursuing industrial and social policies. In developing countries, export duties are usually imposed on raw materials and agricultural products. In Azerbaijan, where base metals are the main focus of export duties, the relative export value of these products have sharply dropped from 3% in 2007 to 0.6% in 2010 (see Table 3 and Graphs 1 and 2). Azerbaijan's export duty collections, which are exclusively due to the export of (some) basic metals, reached 205,796 manats in 2010. This is less than 1% (=205,796 / 2,358,100,000) of the total tax collection from the non-oil sector in 2010. Hence, export duties are not significant sources of revenue for the government of Azerbaijan. Consequently, the opportunity for raising revenue by the government cannot be a determining factor in retaining the export duties that are reported in Table 1 (above).

Table 3: Relative Export of Base Metals and Articles Thereof

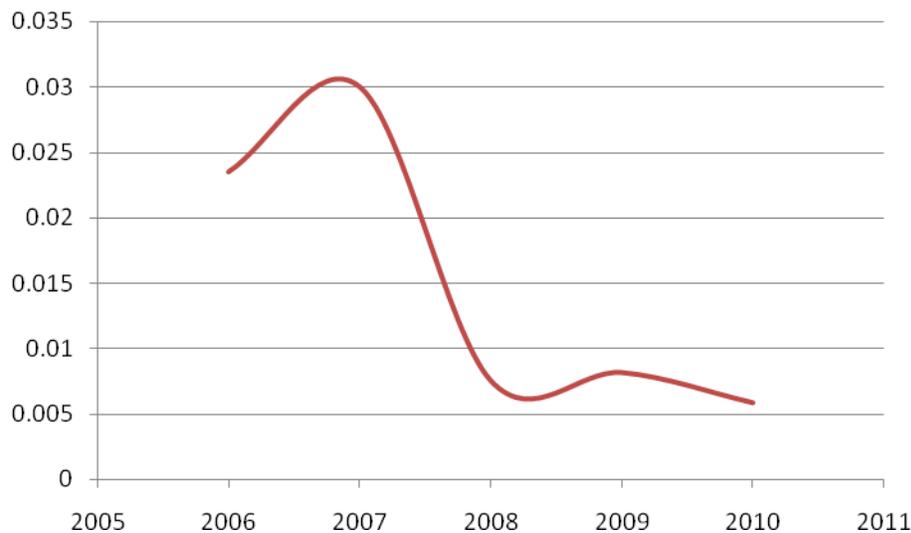
| | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-------|-------|-------|-------|-------|
| Base metals and articles of base metal % Total Export | 2.35% | 3.00% | 0.76% | 0.82% | 0.59% |

Source: State Statistical Committee

Graph 1: Historical Trends in the Exported Values of Iron and Steel and Articles thereof (thousands of \$)



Graph 2: Historical Trend in the Export of Base Metals and Articles Thereof Relative to the Total Export



Social Policy (Employment)

Export duties lower the input prices for certain industries that employ a large number of individuals. In 2009, *fabricated metal* industries employed around 5,000 individuals in Azerbaijan. On the other hand, those providing *basic metal input* employed more than 8,000 individuals. Based on these facts, supplying *basic metal input* appears to be more labor-intensive than the production of *fabricated metal*. Given the adverse impact of the export duties on the provider of *basic metal input*—reducing the chance of selling products at world prices—one can assume that maintaining a higher employment level, and/or benefiting the

labor in *the basic metal input* industry by higher wages, is not the policy goal for imposing export duties and/or export ban in Azerbaijan.

Infant Industry

An infant industry argument would consider export duties as a form of subsidy (for providing cheap input) to selected industries that are capable of becoming competitive in the international markets. However, the infant industry argument must be balanced against the view that perverse incentives due to the subsidies/protection would prevent the targeted industries from becoming efficient and from developing viable plans for independent growth. Moreover, the industry benefiting from the export duty may find it beneficial to devote more resources in keeping the export duties in place than using the resources to improve efficiency of its operation. The latter argument is supported by the domestic price of scrap metal (input) which is about one-fifth of the exported metals (output).⁷ Given that, Azerbaijan's banning of the export of ferrous and non-ferrous metal scraps and wastes has been in effect for a decade, and that the metallurgy industry is still demanding protection, one may argue that: a) the industry cannot reduce its costs (develop a viable comparative advantage); b) the industry benefits from the status quo (cheap input); and, c) the infant industry argument no longer applies. In any of these cases (a, b, or c), the existing export duties are hampering Azerbaijan's ability to efficiently allocate its productive resources.

Asset Stripping

Another argument for export duties was to curb asset stripping, which was common in the early days of transition in the Former USSR, where the theft of certain valuable commodities for the exporting to other countries was taking place. However, with the improvement in the rule of law (and improved property rights and security), this argument does not carry as much weight as it did in the early years of transition to a market system. Moreover, one might expect that the inventory of unsupervised (non-secured) assets would significantly diminish over the last two decades. Hence, export bans and export duties for curbing asset stripping might not be a valid argument for circumventing the normal operations of markets in basic metals and, especially, those of *ferrous and non-ferrous metal scraps and wastes*, which are still subject to export ban (see Decree number 457).

Improving the Terms of Trade

For a large country that dominates the export market, an export tax could lead to improvement in the terms of trade. However, the countermeasures by other countries (tax, tariff, tolls, etc) may render this strategy (taxing exports) useless or counterproductive. Currently, Azerbaijan

⁷ The major producer in the industry using scrap metal, Baku Steel Company, bought scrap metal for \$120 per ton and sold its output for \$530 per ton in 2009. For example, see: www.abc.az/eng/news/33673.html.

does not enjoy a dominant country status in the export of any of the goods listed in Table 1 (above) or reported in Table 2 (above).

Price Stabilization

If the export taxes are allowed to change on a procyclical basis, then they can stabilize the export prices. During the periods of high international demand for the exported products, export taxes could be raised (based on discretion or by indexing). During the periods of low international demand for the exported products, export taxes could be reduced. This process ensures stability of export prices for the supplier of the exported products. However, the automatic and/or discretion mechanism to move export taxes pro-cyclically requires significant political commitment, long-term economic objectives and well developed plans, knowledge of the international markets, and agility to respond to unforeseen events. Given the complexity of the process and the inherent uncertainties in the countries in transition, export taxes may prove to be a poor policy instrument for stabilizing the prices of exported products in Azerbaijan.

Reducing Inflationary Pressures

Export taxes tend to reduce prices of inputs (say, basic metals) in Azerbaijan so may be considered as a tool to reduce tendencies for cost-push inflation (i.e., when a supply reduction leads to a higher price for the input). Similarly, export taxes leading to lower prices of outputs (say caviar or final goods in Azerbaijan) may be considered as a tool to reduce demand-pull inflation. Nonetheless, since a persistent inflation is mainly due to higher supply of money (relative to the demand for money), the use of export taxes for reducing inflationary pressures may not lead to the desired results.

Revenue Stabilization

In the absence of financial markets that would allow for the debt instruments to be used for stabilizing the government's revenue and spending needs, revenues from export taxes could be used as a source for such stabilization. However, export taxes from products listed in Table 1 do not provide a viable source of revenue for Azerbaijan that would assist in this context. Azerbaijan's oil revenue and its national (oil) fund can serve the same purpose (cushioning potential tax revenue fluctuations).

Sum Up: Countries Dominating World Market May Benefit from an Export Tax

If Azerbaijan dominates the world market for any product, or if Azerbaijan faces a highly inelastic demand for any of its products, then imposition of an export duty might be justified on economic grounds. This further assumes that there are no countermeasures by other countries that would hurt Azerbaijan's interest in the related international trades. Theoretically,

Azerbaijan could select an optimum export duty by approximating the inverse of the price elasticity of demand for its exportable products.⁸ Currently, Azerbaijan does not dominate the international market for any of its products and does not face an inelastic demand either. However, Azerbaijan bans certain exports and imposes export duties on some of the base metals that are classified under the harmonized system (HS) codes 72, 74, 76, and 78-80. Without a welfare maximizing economic rationale, one may assume that the current export duties and export bans could be due to other underlying unknown issues, and/or that the current duties and bans are outdated and must be removed.

Export Duties in Azerbaijan

In Azerbaijan, export duties are mainly used as a tool for industrial policy to provide cheaper input for selected domestic industries.⁹ In this context, one usually assumes that the latent comparative advantage of an industry will eventually contribute to the overall economy.¹⁰ In the initiation process of an export duty, future benefits are well discounted and magnified, while substantial latent costs are ignored. Since a measurable standard and an enforceable plan are often the missing components of initiating protection from competitive forces, the industrial dependence on government interventions against the winds of change will become a persistent component of the industrial strategy for survival.

Beneficial imposition of export duties as an economic tool requires not only market dominance, but also significant knowledge of domestic and international markets. Additionally, to sustain the benefits overtime, policy and administrative agilities are required. The international markets and domestic economic incentive structures usually create a formidable dynamic environment that renders the export duties ineffective, if not harmful to the domestic economy. A review of evidence (below) shows that Azerbaijan's presence in the international market for basic metal is insignificant and its strategy to subsidize users of basic metal has not succeeded in maintaining their employment levels overtime.

⁸ This is known as the Ramsey rule.

⁹ On the use of export duty as a tool for industrial policy see: Goode, Richard and George E. Lent and P.D. Ojha. "Role of Export Taxes in Developing Countries." Staff Papers-International Monetary Fund 3, no. 13 (1966): 453-503. Also, see Devarajan, Shantayanan and Delfin Go and Maurice Schiff and Sethaput Suthiwart-Narueput. "The Whys and Why Nots of Export Taxes." Policy Research Working Paper 1684, (1996): 1-25.

¹⁰ Piermartini, Roberta. "The Role of Export Taxes in the Field of Primary Commodities." World Trade Organization, (2004): 1-24,
http://www.wto.org/english/res_e/booksp_e/discussion_papers4_e.pdf.

Export duties usually have unintended consequences in the short-run and/or in the long-run. In particular, export duties reduce the incentive to use more efficient technologies. Industries that are counting on low input prices (government protection) have the incentive to lobby the government to continue levying export duties on the materials they use as input. WTO members view export duties as distortive by providing low cost input to domestic producers or making domestic goods more competitive in comparison with imports of the 'like' products. WTO members expect Azerbaijan to eliminate export duties before accession.

In the short-run, export duties increase domestic supply and lower domestic price of restricted product. This distorts domestic prices and, consequently, leads to welfare losses; especially, if Azerbaijan is not a dominant producer of the underlying product in the world market. When export duties lead to higher domestic supply of an industrial input, then this might be considered as an implicit subsidy to the domestic processing industry. For a small exporting country, the impact of export control on the world price of the restricted product is negligible. Hence, the impact of export duty is mainly absorbed by the domestic producer of exportable product.

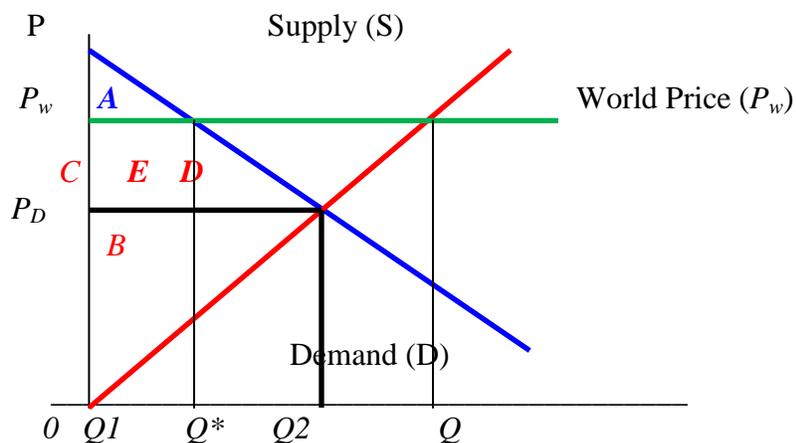
The Impact of Export Duties with No Market Dominance

Export duties are usually distortionary and lead to welfare losses for the countries that use them for revenue generation and/or for industrial and social policies. If an exporting country, like Azerbaijan, that does not dominate the international market for basic metals, introduces an export duty on the basic metals' exports, then it can only improve its domestic supply (lower domestic price) and generate some (marginal) tax revenue for the government.¹¹ However, the result of higher tax revenue and a lower domestic price is usually the significant net loss in welfare, which may be reflected in lower production, lower export, and lower employment in the exporting industry. A standard partial equilibrium analysis of this issue is useful.

In a simple standard model of an open economy, where the world price of a commodity P_w is higher than its domestic price P_D , suppliers of commodities (e.g., basic metals) usually gain more from trade than those demanding the commodities. Figure 1 represents this by the fact that, the area under the world price (B + C + E + D) is larger than the one above it (A).

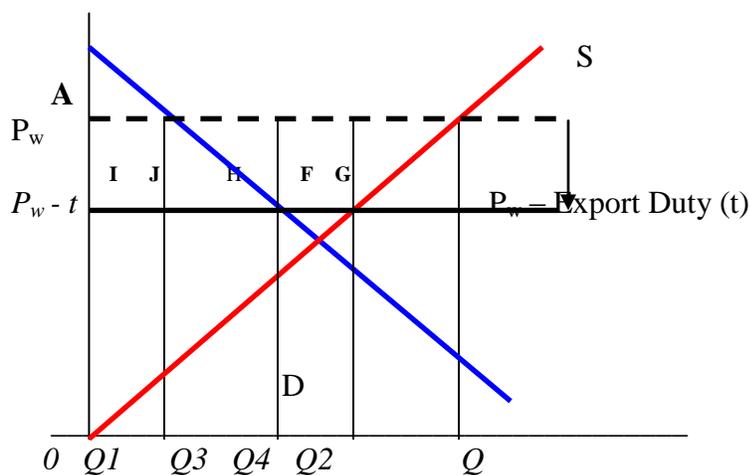
Figure 1: Competitive Market with No Export Duty

11 A country that dominates a market (i.e., it can influence the international price of its product) can improve its terms of trade by levying an export duty on the product for which it has market dominance. In this case, an export duty influences export supply, international demand, and the distribution of welfare within the country and between the trading countries.



However, if the government imposes an export duty (t) to generate revenue and/or subsidize the consumers of a particular commodity, e.g., those using basic metals to produce fabricated metal, then this would distort the established gains from trade by reducing the effective price to the suppliers ($P_w - t$). As a consequence, exports would decline ($Q_4 - Q_3$), while the government would gain revenue [$t(Q_4 - Q_3)$]. In Figure 2, the government revenue from the export duty is shown by the area F, and the consumer gains by I + J. The welfare loss due to the imposition of an export duty is captured by the G + H. Overall, the suppliers' loss due to an export duty is very large and is represented by I + J + H + F + G. Hence, in a standard trade model, where, the underlying exporting industry is not a dominant market power in the world, imposing an export duty may lead to significant distortion and welfare loss for the economy.

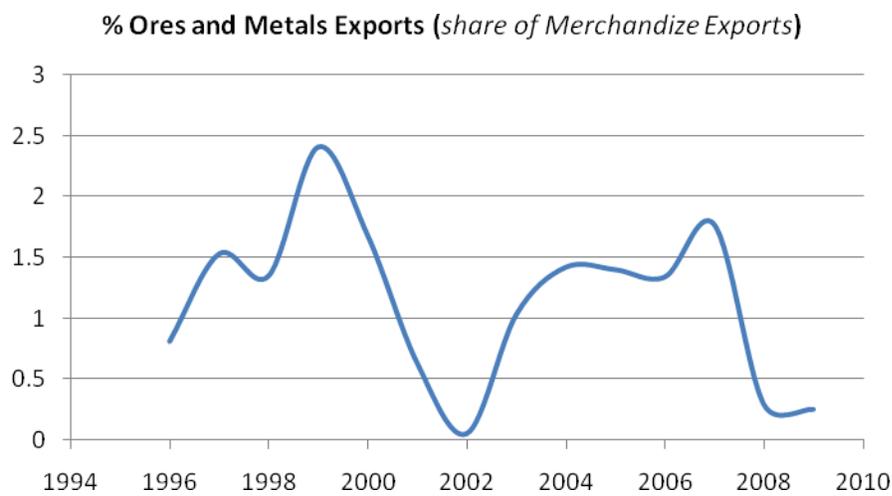
Figure 2: Competitive Market with Export Duty



EXPORTING METAL FROM AZERBAIJAN

Historical data on the export of ores and metals shows that the share of these commodities as a percentage of merchandise exports has sharply dropped over the last few years (see Graph 3). In 2009, the share of ores and metals as a percentage of the merchandise exports, reached its lowest level of 0.25. A comparison of the 2009 data with that of 2007 shows that the share of ores and metals exports is only 14% (= 0.25 / 1.77) of what it was in 2007. This suggests that the export of ores and metals is no longer a substantive component of Azerbaijan’s overall international trade volume.

Graph 3: Share of Ores and Metals Exports in Azerbaijan



Source: World Bank

Table 4 shows that, in terms of quantity, 2008 was the peak for exports of ‘ferrous waste and scrap, re-melting scrap ingots or iron or steel’. Germany and the United Kingdom are consistently the main importer of these products. For 2010, Estonia emerged as the major importer, importing 500 tons or 69% (=500/718) of Azerbaijan’s total export of products classified under HS code 7204.

Table 4: Exported Quantities of Ferrous waste and scrap, Re-melting scrap ingots or Iron or Steel (HS Code: 7204) - (in Tons)

| Importers | 2007 | 2008 | 2009 | 2010 |
|-----------------------|------|------|------|------|
| World | 260 | 967 | 256 | 718 |
| Estonia | 0 | 0 | 0 | 500 |
| Germany | 260 | 500 | 148 | 146 |
| United Kingdom | 0 | 0 | 108 | 72 |
| Iran | 0 | 328 | 0 | 0 |

| | | | | |
|---------------|---|-----|---|---|
| Italy | 0 | 23 | 0 | 0 |
| Turkey | 0 | 116 | 0 | 0 |

Source: ITC calculations based on COMTRADE statistics

In terms of value of exported 'ferrous waste and scrap, re-melting scrap ingots or iron or steel' products, Table 5 shows that the peak was reached in 2008, when Azerbaijan exported about \$364 million worth of base metals and articles thereof. Table 5 also shows that, the exports of base metals and articles thereof have been sharply dropped since 2008. In 2009 and 2010, the exported values of base metals and articles thereof were one-third of the peak value in 2008, or \$121 million (in 2009) and \$126 million (in 2010), respectively.

Table 5: Export of Base Metals and Articles of Base Metal (thousands of \$)

| | 2007 | 2008 | 2009 | 2010 |
|---|-------------|-------------|-------------|-------------|
| Base metals and articles of base metal | 181,724.8 | 363,556.4 | 121,201.9 | 126,221.4 |

Source: State Statistical Committee

Given that the Presidential Decree 457 suspended export of ferrous and non-ferrous metal scraps and wastes from Azerbaijan, it is surprising that Azerbaijan still exports ferrous and non-ferrous metal scraps and wastes. In fact, the collection of export duties from commodities classified under the related HS Code (72 and 73) indicates the need to investigate the rules, regulations, processes and procedures for executing this decree and/or classification of exported commodities.¹²

Table 6 presents the country-by-country data on the value of exported base metals and articles thereof. Estonia, Germany, and the United Kingdom are the only importers of the base metals and articles of base metal from Azerbaijan.

Table 6: Country-by-Country Export of Base Metals and Articles of Base Metal (thousands of \$)

| Importers | 2007 | 2008 | 2009 | 2010 |
|------------------|-------------|-------------|-------------|-------------|
|------------------|-------------|-------------|-------------|-------------|

12 Clearly, one may also note that, if certain basic metals (e.g., aluminum) are wrongly classified under a particular HS Code (e.g., 72), then this may lead to an understimation of the export duties. Nonetheless, an analysis based on the ITC calculations based on COMTRADE statistics and those of the State Statistical Committee is provided in the APPENDIX III.

| | | | | |
|-----------------------|-----|-----|----|-----|
| World | 104 | 369 | 70 | 166 |
| Estonia | 0 | 0 | 0 | 112 |
| Germany | 104 | 200 | 40 | 37 |
| United Kingdom | 0 | 0 | 30 | 17 |
| Iran | 0 | 85 | 0 | 0 |
| Italy | 0 | 30 | 0 | 0 |
| Turkey | 0 | 54 | 0 | 0 |

Source: ITC calculations based on COMTRADE statistics

Table 7 shows that Iron and Steel (HS Code 72) and Articles of Iron and Steel (HS Code 73) constitute the bulk of exported values in the base metal and articles thereof from Azerbaijan. In particular, Iron and Steel and article thereof (HS Codes 72 and 73) were 85% (=16.54% + 68.7%) and 89% (= 61.00% + 27.88%) of all exported base metals in 2009 and 2010. However, Table 7 also reveals that the reported values by the State Statistical Committee, in some instances, do not overlap with the reported values from the international bodies (i.e., the ITC calculations based on COMTRADE statistics). For example, the State Statistical Committee's reported exported values for 2009 and 2010 are \$103 and \$112 millions for *Iron and Steel and Articles of Iron and Steel* (see Table 7). On the other hand, the ITC calculations based on COMTRADE statistics reported in Table 6 are \$70 and \$166 thousands for '*Export of Base Metals and Articles of Base Metal.*' In this report, for the estimation of the impact of export duties, the ITC calculations based on COMTRADE statistics are complemented by the official Azerbaijan data.

Table 7: Export of Base Metals and Articles of Base Metal

| HS Code (Two Digits) | Base metals and articles of base metal | % of Total Exported Values | |
|-------------------------|---|----------------------------|--------|
| | | 2009 | 2010 |
| 72 | Iron and steel | 16.54% | 61.00% |
| 73 | Articles of iron and steel | 68.78% | 27.88% |
| 74 | Copper and articles thereof | 3.17% | 6.94% |
| 75 | Nickel and articles thereof | | |
| 76 | Aluminum and articles thereof | 9.94% | 2.13% |
| 78 | Lead and articles thereof | 0.79% | 1.61% |
| 79 | Zinc and articles thereof | 0.01% | 0.22% |
| 82 | Tools, implements, cutlery, spoons and forks, of base metal | 0.62% | 0.14% |
| 83 | Miscellaneous articles of base metal | 0.16% | 0.09% |

Source: State Statistical Committee

An examination of the list of products subject to export duties in Azerbaijan (APPENDIX II) and the related available international data on their exports show that only several metal products were exported in 2009. In particular, limited quantities of ferrous metals (re-melting scrap ingots/alloys), copper, aluminum, lead, and zinc are exported from Azerbaijan (see Table 8).

Table 8: Reported Export Data on Metals in 2009

| Name of Commodities | Export Rate | duty | Export Value in thousands of USD |
|---|-------------|--------|----------------------------------|
| Ferrous/Iron: remelting scrap ingots (alloys) | 1000 kg, | 5 USD | 70.0 |
| Copper and articles thereof | 1000 kg, | 15 USD | 3,845.0 |
| Aluminum -- primary | 1000 kg, | 15 USD | 11,659.0 |
| Aluminum --- in ingots or liquid state | 1000 kg, | 15 USD | 266.0 |
| Lead and articles thereof | 1000 kg, | 15 USD | 952.0 |
| Zinc and articles thereof | 1000 kg, | 15 USD | 12.0 |
| TOTAL | | | 16,804.0 |

Reported data in Table 8 shows that the exported value of all commodities (iron, copper, aluminum, lead and zinc) is less than \$17 million dollars in 2009. Aluminum provides the lion share (70%) of exported commodities in Table 8. Copper provides 23% and 'lead' another 5% of the exported values in 2009. Thus, aluminum, copper, and lead provide 98% of all exported values.

Table 9 depicts the destination of exported metals from Azerbaijan in 2009. Turkey appears as the major importer of metals (by export value) from Azerbaijan in 2009. In particular, Turkey imports 100% of zinc export, 88% of copper, 59% of lead, and a substantial portion of all aluminum exports from Azerbaijan. In 2009, Germany and the United Kingdom imported all of the ferrous/iron exported from Azerbaijan. The lion share of ferrous/iron export went to Germany (57%) and the rest to the United Kingdom (43%). In 2009, Hong Kong and Romania were the major destinations for the primary and ingots aluminum exports, respectively. Hong Kong imported 60% of the total export in primary aluminum, and Romania 56% of the export in ingots aluminum from Azerbaijan in 2009. Turkey was a major importer of lead (59%)—the rest

was imported by the UAE (59%) and others (12%). Iran imports of metals from Azerbaijan in 2009 consisted of 7% of primary aluminum and 7% of aluminum ingots. . Table 9 also shows that Georgia and a host of other countries are the destinations for only small factions of the exported metals from Azerbaijan.

Table 9: Reported Export Data on Metals by Trading Partner in 2009

| Code | Name of goods | Rate of Export duty (in US dollars according to percent of customs value or measurement unit) | 2009 Export Value (in thousands of USD) | % Export Value by Country per Commodity | 2009 Export Quantity (in ton) |
|-----------|---|---|---|---|-------------------------------|
| 720450 | Ferrous/Iron- re-melting scrap ingots (alloys): | 1000 kg, 5 USD | 70 | | 256 |
| | Germany | | 40 | 57% | 148 |
| | United Kingdom | | 30 | 43% | 108 |
| Group 74 | Copper and articles thereof | 1000 kg, 15 USD | 3845 | | |
| | Turkey | | 3372 | 88% | |
| | UAE | | 264 | 7% | |
| | Others | | 209 | 5% | |
| 760120100 | Aluminum-- primary | 1000 kg, 15 USD | 11659 | | 12878.0 |
| | Hong-Kong, China | | 7014 | 60% | |
| | Turkey | | 3768 | 32% | |
| | Iran | | 866 | 7% | |
| | Georgia | | 11 | 0% | |
| 760120910 | Aluminum --- in ingots or liquid state | 1000 kg, 15 USD | 266 | | 520.5 |
| | Romania | | 149 | 56% | 298.5 |
| | Turkey | | 98 | 37% | 192.0 |
| | Iran | | 18 | 7% | 30.0 |
| Group 78 | Lead and articles thereof | 1000 kg, 15 USD | 952 | | |
| | Turkey | | 559 | 59% | |
| | UAE | | 278 | 29% | |
| | Others | | 115 | 12% | |
| Group 79 | Zinc and articles thereof | 1000 kg, 15 USD | 12 | | |

| Code | Name of goods | Rate of Export duty (in US dollars according to percent of customs value or measurement unit) | 2009 Export Value (in thousands of USD) | % Export Value by Country per Commodity | 2009 Export Quantity (in ton) |
|------|---------------|---|---|---|-------------------------------|
| | Turkey | | 12 | 100% | |

Given the export duty laws of Azerbaijan, which impose tax on the difference between the contracted price (net of expenses for exporting) and the domestic producer price (wholesale price), the major destinations of exported products by values are important in determining the potential revenue gain from imposing export duties. Table 10 shows that Turkey and Hong-Kong absorb 88% of all exported metals (by value) from Azerbaijan. In 2009, about 7.8 million dollars worth of metal exports from Azerbaijan was destined for Turkey. Another 7 million dollars was exported to Hong-Kong. Hence, Turkey and Hong-Kong play a crucial role in determining Azerbaijan's revenues from export duties on metal products.

Table 10: Reported Export Data on Metals by Trading Partner in 2009

| Export Destination | Export Value (in thousands of USD) | % of Total |
|--------------------|------------------------------------|-------------|
| Turkey | 7,809 | 46% |
| Hong-Kong, China | 7,014 | 42% |
| Iran | 884 | 5% |
| UAE | 542 | 3% |
| Others | 324 | 2% |
| Romania | 149 | 1% |
| Germany | 40 | 0% |
| United Kingdom | 30 | 0% |
| Georgia | 11 | 0% |
| Total | 16803 | 100% |

Turkey has classified Azerbaijan as a Special Incentive Arrangement Beneficiary Country (SIABC). As a member of the SIABC, exports of Aluminum from Azerbaijan to Turkey are subject to a 6% Customs Duty Rate (see Turkish Customs Tariffs, page 658).¹³ On the other hand, copper imports from Azerbaijan are free of customs duty in Turkey (see Turkish Customs Tariffs, page 650). Turkey levies a customs duty of 2.5% on Zinc import from Azerbaijan. Overall, after levying customs duty, Turkey subjects imports to an 18% tax which is imposed on the CIF + duty.

¹³ <http://www.gumruk.gov.tr/ENG/trader/Documents/TurkishCustomsTariff2010.pdf>

AD VALOREM EQUIVALENCE OF EXPORT DUTIES

For investigating the impact of eliminating export duties, the specific export duties must be converted to *ad valorem* equivalence. This is also needed when effective negotiations for the WTO accession are of interest. In this context, one must note that the prices of basic commodities are usually subject to significant fluctuations.

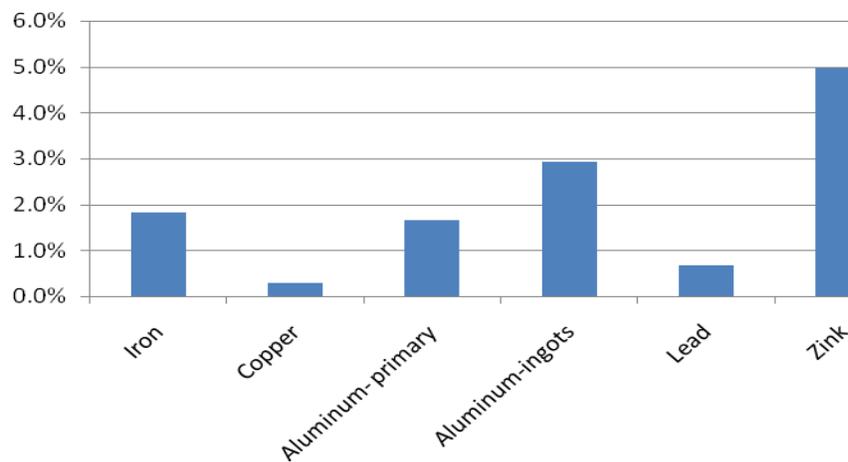
For the conversion of specific taxes to their *ad valorem* equivalence, the specific tariff is expressed as a percentage of average value of the excisable product:

$$ad\ valorem\ equivalence\ rate = (Specific\ Tariff / Value) \times 100$$

Given the availability of statutory export duties per ton (Table 8) and prices of exported metals from Azerbaijan, this is a fairly convenient approach to follow.

Chart 1 depicts the distribution of the *ad valorem* equivalence values for the export duties on the basic metals.

Chart 1: Distribution of the *ad valorem* equivalence Values for the Export Duties on the Basic Metals.



The estimated values show that the export duty rates (*ad valorem* equivalence rates) are between 0.3% - 5%. Exported zinc is taxed at the highest rate (5%) and copper at the lowest rate (0.3%). Aluminum export is taxed between 1.7% - 2.9%. Iron, which is also subject to export ban based on a Presidential Decree (457), is taxed at 1.8%. The *ad valorem* equivalence rates for export duties do not appear to be prohibitive and curb the tendency to export if the international prices are rising. In fact, Graphs 4 and 5 show that during the last half-decade, prices of base metals (and, especially, iron) have experienced a significant rise. Given that, the

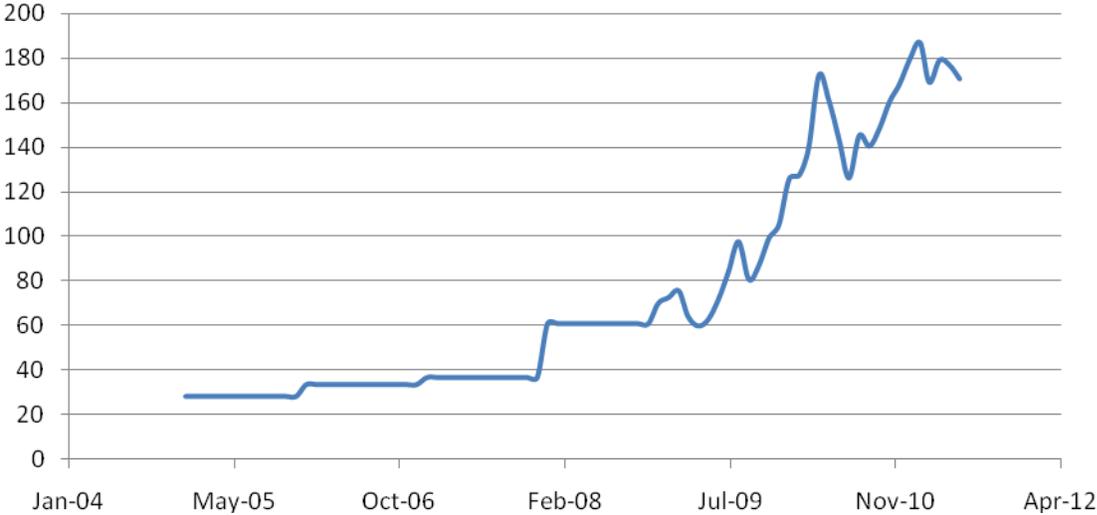
export duties are casted in 'specific' terms (e.g., \$5 per ton), the rising prices of basic metals renders export duties ineffective in regulating or curbing the export of the underlying basic metals.

Graph 4: Historical Trends in the International Prices of Basic Metals (\$)



Source: Data is from IMF

Graph 5: Historical Trends in the International Prices of Iron (\$)



Among other things, Graphs 4 and 5 show that in the recent years, prices of aluminum, copper, lead, zinc, and iron have significantly fluctuated. Given the instability in the prices of underlying basic metals, updating the *ad valorem* equivalent rate estimates on periodic bases is useful practice. That is, to be current and properly assess the proper impact of export duty

elimination, one must update the *ad valorem* equivalent rate estimates as the new price data becomes available.

Revenue Impact Assessment

Revenue estimation takes place in the absence of actual data on tax revenues. Under certain assumptions, estimated revenues are generated and then generalized to the hypothetical situations (or the state of the economy). For revenue estimation, a tax calculator, current laws of Azerbaijan, official data, and the estimates of export duty rates (*ad valorem equivalence rates*) are helpful.

The current laws of Azerbaijan indicate that the difference between adjusted export price (adjusted contractual price) and wholesale price is the tax base per unit of a strategic commodity. Adjustment in export price will take into account the cost of exporting. Specifically, the “difference between the contractual price of strategic product produced in the Azerbaijan Republic (less export expenditures) and wholesale price established by the enterprise within the Republic” will be taxed.

To assess the impact of the elimination of export duties, we use the latest available (complete) data to estimate the potential export duty revenues. Thus, Table 11 reports our revenue estimation exercise for 2009. The reported revenue estimates in Table 11 are based on the available tax laws and the data from the State Statistical Committee and the export data that Azerbaijan regularly reports to the United Nation (UN). Additionally, when certain values are not reported, their imputed values are used.

To estimate the 2009 export duty revenues in Table 11, we used an *optimistic scenario*, which assumes no cost in exporting basic metals. That is, the only relevant base values are the domestic values in Azerbaijan. Accordingly, under this optimistic scenario, we estimate that the revenue estimate from exporting ferrous/iron, copper, aluminum, lead, and zinc must have been less than \$43 thousands, which is only 20% ($=\$42,930 / \$205,796$) of all reported revenues (\$205,796) that are collected from exporting metals and related exports. This also implies that, while Azerbaijan exported almost \$17 million worth of basic metals (i.e., those that are subject to export duties), its export duty revenue was 0.25% ($=\$42,925 / \$16,084,000$).

A more *realistic scenario* would allow the subtraction of a few percentages from the taxable export values to take into account the export costs (including transportation, and implicit tariffs and taxation in importing countries, especially, those of Turkey). However, this will not change the main conclusion one may reach by using the reported estimates in Table 11. In particular, we conclude that the export duties are not a source of significant revenue in Azerbaijan. Hence, the elimination of export duties should not cause a significant revenue loss. In fact, if elimination of export duties leads to higher exports and more investment in the country, then the potential for overall revenue gain (from higher economic activities) exists. The standard

economic framework (above) that guides the analysis of the impact of export duties (for a country with no international dominance in basic metals) on the economy clearly reinforces these conclusions.

Table 11: Revenue Estimation for Taxation of Exported Basic Metals

| Products (abbreviated name) | 2009 | | | | | | | |
|--------------------------------|------------------------|----------------------------------|------------------------|-----------------------------|-------------------------------|-----------------------------------|----------------------------------|----------------------------|
| | Ad Valorem Equivalence | Export Value in thousands of USD | Export Quantity in ton | Export Price in USD per ton | Producer Price in USD per ton | Domestic Value in thousand of USD | Taxable Export in thousand of US | Revenue in thousand of USD |
| Iron | 0.01829 | 70.0 | 256 | 273.44 | 72 | 18 | 51.6 | 0.94 |
| Copper | 0.00288 | 3,845.0 | 739 | 5200.00 | 1,365 | 1,009 | 2,836.1 | 8.18 |
| Aluminum - primary | 0.01657 | 11,659.0 | 12878.0 | 905.34 | 753 | 9,698 | 1,960.8 | 32.49 |
| Aluminum -ingots | 0.02935 | 266.0 | 520.5 | 511.05 | 425 | 221 | 44.7 | 1.31 |
| Lead | 0.00681 | 952.0 | 3,283.89 | 2204.00 | 290 | 952 | 0.0 | 0.00 |
| Zink | 0.04962 | 12.0 | 39.70 | 0.30 | 302 | 12 | 0.0 | 0.00 |
| TOTAL | | 16,804.0 | | | | | 4,893.23 | 42.93 |

Source: UN, State Statistical Committee

INDUSTRY IMPACT: SALES, PRICES, AND EMPLOYMENT

Industry Sales

Table 12 show that 116 (= 42 + 74) enterprises in Azerbaijan engage in producing basic metal (42 enterprises) and fabricated metal products (74 enterprises) in 2009. Out of these 116 enterprises, 20 are state-owned and the rest are private. To the extent that the basic metal producing industry provides input to the fabricated metal industry, one would expect the fabricated metal industry to benefit from the export duties imposed on the basic metal producing industry. Export duties tend to divert trade inward (increase domestic supply) and provide, in this case, cheaper input to the fabricated metal manufacturers. However, the cost of export duties could be severe on the basic metal manufacturers, and the benefit could be high for the domestic producers of fabricated metal products.

Table 12: Dynamics of Sales and Employment in the Metal Industries (2008-2009)

| | 2008 | 2009 | %Change |
|--|--------|----------|---------|
| Basic Metal Manufacturers | | | |
| Number of Enterprises | 42 | 42 | 0.0 |
| Sales (million mantas) | 348.9 | 88.8 | -0.745 |
| Employment (thousand persons) | 9.9 | 8.5 | -0.1647 |
| Investment (million manats) | 30.4 | 19.7 | |
| Cast-Iron (ton) | 1,797 | 1,578 | -0.138 |
| Aluminum (ton) | 306.3 | 36,000.6 | 7.368 |
| Fabricated Metal Products Manufacturers | | | |
| Number of Enterprises | 84 | 74 | 0.1351 |
| Sales (million mantas) | 166.7 | 101.2 | -0.392 |
| Employment (thousand persons) | 5.0 | 5.2 | 0.04 |
| Investment (million manats) | 84.3 | 155.0 | |
| Cable and wire from ferrous (ton) | 391.3 | 322.4 | -0.213 |
| Aluminum-doors & sash pulley (unit) | 20,548 | 12,473 | -0.647 |

Source: State Statistical Committee

While export duties reduce profitability of the basic metal manufacturers, they tend to subsidize the fabricated metal manufacturers. Table 12 shows that both sales and employment in the basic metal industry sharply declined in 2009. Between 2008–2009, sales of the basic metal industry dropped from 349 thousand manats to 89 thousand manats; i.e., a 75% decline. Similarly, sales of the fabricated metal industry declined, but by a smaller percentage (i.e., 40%). On the other hand, while the number of employees was reduced by 16% in the basic metal industry, the gain in the fabricated metal industry was only 0.04% percentage point.

Assuming similar elasticities of supply for both industries, one might be able to explain about 40% drop in the sales by the basic metal manufacturer and the fabricated metal manufacturers as having similar causes. However, the remaining drop, i.e., 35% ($=0.745 - 0.392$), must be due to the export duties and/or the some causal chain specific to the basic metal industry. Given that export duties are binding and reduce profitability of the basic metal manufacturers, an unspecified portion of this deviation (35%) could be attributed to the impact of export duties on the basic metal manufacturers. Nonetheless, substantive reduction in the sales of the fabricated metal manufacturer indicates that imposing export duties to provide cheaper input to the domestic industries is not fully effective in preventing substantive declines in the sales (and or productivity).

Industry Employment

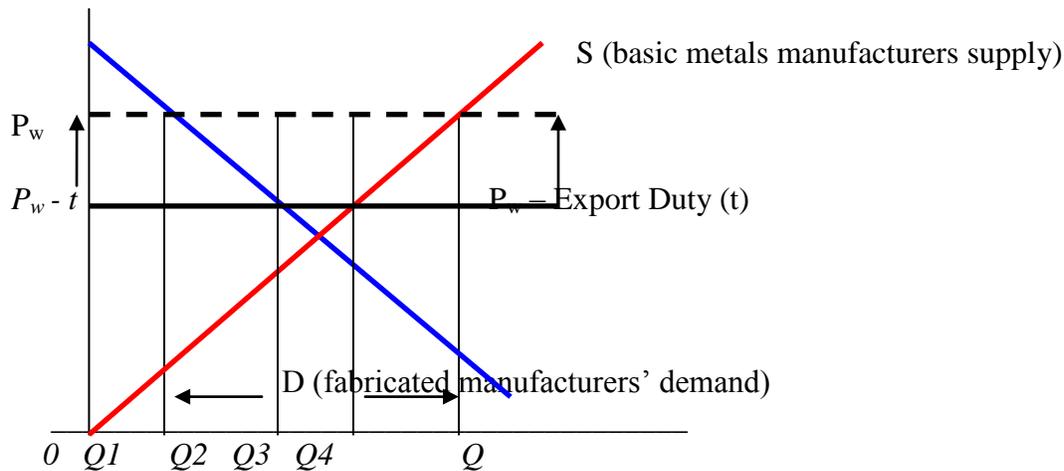
The employment dynamics between the basic metal manufactures and fabricated metal manufacturer provides a more interesting picture, if the purpose of the government's policy for imposing export duties is to increase employment in certain industries and/or the country. The reported data in Table 12 shows that while the employment level in the basic metal industry

declined by 1,400 people (or 16%), the increase in the employment level in the fabricated metal industry was only by 200 people (or 4%). The increase in the net unemployment of 1,200 (=1400-200) appears to reflect the asymmetric response of these two industries to the export duties. Thus, the efficacy of using export duty for increasing domestic employment is suspect.

Prices

Elimination of export duties will allow the basic metal manufacturers to sell their products at the world prices (P_w) that are higher than the world prices minus export duty ($P_w - t$). Figure 3 depicts the impact of eliminating the export duty (t) on the basic metal export. This figure shows that after elimination of export duty, the export of basic metals will increase from Q_3 to Q_4 . Furthermore, Figure 3 shows that the quantity basic metals supplied to the domestic industry (fabricated manufacturers) will decrease from Q_2 to Q_1 .

Figure 3: Impact of Eliminating Export Duty



Elimination of export duties will have a price effect for both the basic metal manufactures and the fabricated manufacturers. The fabricated manufacturers will have to compete for the basic metals in an international arena and pay competitively higher prices for their purchases of basic metals. The basic metals manufacturers (along with the labor) will be the beneficiary of the elimination of the export duties and enjoy higher prices they will receive for their products (and services).

Given the *ad valorem* equivalence rate, τ , the current domestic price of basic metals, P , may be written as:

$$P = P_w (1 - \tau)$$

Elimination of export duties and the export bans can be approximated by reduction in the *ad valorem* equivalence rate, $\Delta\tau < 0$, which leads to an increase in the domestic price of basic metals (P) towards the world price (P_w).

$$\begin{aligned}\Delta P &= \Delta[P_w (1 - \tau)] \\ &= \Delta(P_w - \tau P_w) \\ &= \Delta P_w - \tau \Delta P_w - P_w \Delta\tau\end{aligned}$$

Assuming that the only source of change is the change in export duties (i.e., $\Delta P_w = 0$), then:

$$\Delta P = - P_w \Delta\tau$$

Since percentage change in the price of basic metals may be written as:

$$\% \Delta P = \Delta P / P,$$

then,

$$\% \Delta P = - P_w \Delta\tau / [P_w (1 - \tau)]$$

or,

$$\% \Delta P = - \Delta\tau / (1 - \tau)$$

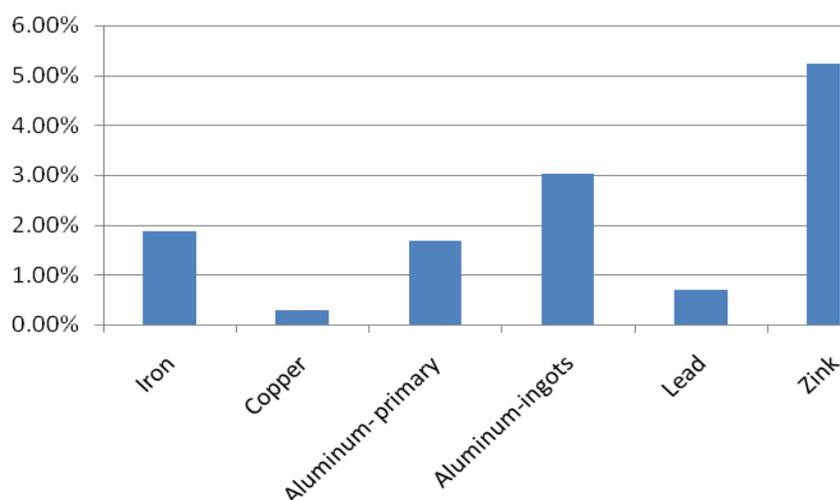
Given that $\Delta\tau < 0$, and $(1 - \tau) > 0$, then the growth rate of prices of basic metals ($\% \Delta P$) due to elimination of export duties will be positive. That is, higher prices will be paid by the metal fabric manufacturers. Nonetheless, due to the added transposition costs, for a given quality and specification, the metal fabric manufacturers will find it cheaper to buy the basic metals at home (in Azerbaijan) than from abroad.

Table 13 and Graph 2 present the estimated growth rate of basic metal prices due to the elimination of export duties. The fabricated metal manufacturers using ferrous and iron related scraps will experience less than 2% increase in the prices of basic metal input. The smallest price increase is observed for the users of copper (0.29%) and lead (0.69%) . Users of aluminum (primary, in ingots or liquid state) will experience a rise of 1.68%-3.02% in the prices of this product. The users of zinc will face the largest percentage increase in the prices of the input (i.e., 5.22%). Overall, the reported estimates show that the rise in the price of basic metals are not very large and are confined to around 5% or lower, if the export duties are eliminated in Azerbaijan.

Table 13: Impact of Eliminating Export Duties on Prices of Basic Metals

| Commodities | Export duty Rate | <i>Ad Valorem Equivalence</i> | % Change in the Prices of Basic Metals |
|--|------------------|-------------------------------|--|
| Ferrous/Iron: re-melting scrap ingots (alloys) | 1000 kg, 5 USD | 0.01829 | 1.86% |
| Copper and articles thereof | 1000 kg, 15 USD | 0.00288 | 0.29% |
| Aluminum —primary | 1000 kg, 15 USD | 0.01657 | 1.68% |
| Aluminum — in ingots or liquid state | 1000 kg, 15 USD | 0.02935 | 3.02% |
| Lead and articles thereof | 1000 kg, 15 USD | 0.00681 | 0.69% |
| Zinc and articles thereof | 1000 kg, 15 USD | 0.04962 | 5.22% |

Chart 2: Distribution of the Percentage Change in the Prices of Basic Metals Due to Elimination of Export Duties



The short-Run and the Long-Run Impacts: Exporting Basic Metals

Given the estimated export price elasticities for Azerbaijan, the long-run and the short-run impact of eliminating export duties could be obtained. The estimated export price elasticities for Azerbaijan have a wide range. The range of export price elasticities is between 0.1 to 1.71 as reported by a recent IMF study (see Stephen Tokarick, 2010).

Table 14: Impact of Eliminating Export Duties on Export of Metals

| Commodities | Export Rate | duty | <i>Ad Valorem Equivalence</i> | % Change in Exports Short-Run <i>(Export Price Elasticity: 0.1)</i> | % Change in Exports Long-Run <i>(Export Price Elasticity: 1.71)</i> |
|--|--------------------|-------------|--------------------------------------|---|---|
| Ferrous/Iron: remelting scrap ingots (alloys) | 1000 USD | kg, 5 | 0.01829 | 0.18% | 3.07% |
| Copper and articles thereof | 1000 USD | kg, 15 | 0.00288 | 0.03% | 0.49% |
| Aluminum — primary | 1000 USD | kg, 15 | 0.01657 | 0.16% | 2.79% |
| Aluminum—in ingots or liquid state | 1000 USD | kg, 15 | 0.02935 | 0.29% | 4.88% |
| Lead and articles thereof | 1000 USD | kg, 15 | 0.00681 | 0.07% | 1.16% |
| Zinc and articles thereof | 1000 USD | kg, 15 | 0.04962 | 0.47% | 8.08% |

Table 14 shows that the short-run impact of eliminating export duties on the export of basic metals is negligible. The highest impact of eliminating export duties in the short-run is felt by the exporters of zinc, which may rise by half a percentage point. In the long-run, the impact of eliminating export duties could be significant on the export of zinc, which may increase by 8%, and aluminum (especially, in the ingots or liquid form) which could increase by almost 5%. In the long-run, iron (ferrous) and the primary form of aluminum could be expected to increase by about 3% as well. However, lead and copper do not appear to experience large growth rates in their exports. Hence, the reported statistics in Table 14 do not indicate a very substantive increase in the export of basic metals either in the short-run or in the long-run. Thus, the impact of eliminating export duties on the basic metals should not severely impact the viability of industries using basic metals as input.

While the exports of basic metals may not change by much in the short-run and/or long-run, a byproduct of removing trade barriers is the inflow of foreign direct investment. In addition to the improved efficiency, higher employment, higher average income, higher transparency, and improved welfare and elimination of export duty may lead to significant internal, as well as, foreign direct investment in the manufacturing sector of Azerbaijan. Given the high opportunity costs in maintaining quantitative restrictions (Decree 457) and various duties on the export of basic metals, Azerbaijan is well advised to remove these barriers to trade as soon as possible.

Importing Basic Metals

If basic metal prices rise in Azerbaijan, then a logical reaction would be to explore importing these inputs (basic metals) from abroad, e.g., Kazakhstan. Currently (2010-2011 period), the largest user of basic metals (i.e., Baku Steel Company, BSC) imports around 20,000 tons of basic metals, while using 300,000 tons of basic metals to produce close to 230,000 of fabricated metals.¹⁴ For gauging the impact of eliminating export duties on the potential import of basic metals, we rely on the price elasticities of import demand for basic metals.

A proper econometric approach for estimating the price elasticities of import demand for basic metals should estimate these while holding other prices, productivity, and endowments constant (see, See Kohli, 1991, Harrigan, 1997, Kee, Nicita, and Olarreaga, 2008). Application of this simple procedure for estimating import price elasticities leads to regressing the share of imported product i relative to total output (S) on the relative price (P) of the basic metals (i.e., product i), and other relevant variables that capture the relative factor endowment (V) for Azerbaijan in the sample (see, Kee, et al., 2008). Following Kee, et al.'s (2008) methodology, the underlying regression, parsimoniously, may be expressed by:

$$S_{ij} = \alpha + \beta_i \ln P_{ij} + \gamma \ln V_j + \varepsilon_{ij}$$

where, α is a vector of country and time specific fixed effects. The price a price elasticity of import demand for base metals (η_i) are then obtained by

$$\eta_i = (\beta_i / S_{ij}) + S_{ij} - 1$$

Kee, et al.'s (2008) provide an appropriate derivation and estimation for a number of countries and products. For Azerbaijan, relevant base metal import price elasticities are fairly close to minus one. However, import price elasticity for aluminum (i.e., not alloyed, unwrought) is highly elastic (- 6.4), but statistically insignificant because it has an estimated error that is very high 6.4, thus, leading to a t-ratio of -1. Ferrous/Iron and related products appear to have import price elasticities that are between -0.7 to -1.4 and are highly significant (i.e., t-tests that are much higher than 2). Estimated import price elasticities for lead (-0.9) and zinc (0.8) are less than one i.e., they are inelastic. However, the estimated standard error for the import price elasticity of zinc is less than 2 (i.e., it is statistically insignificant).

Based on the above findings, the elimination of export duties may lead to higher domestic prices of basic metals, which will range from 0.29% - 5.22%. We consider two scenarios: In Scenario 1, we will assume that the relative import price of basic metals is reduced by 0.29%. In Scenario 2, we will assume that the relative import price of basic metals is reduced by 5.22%.

14 In the following case study of BSC, we mainly focus on the available data and information for 2009.

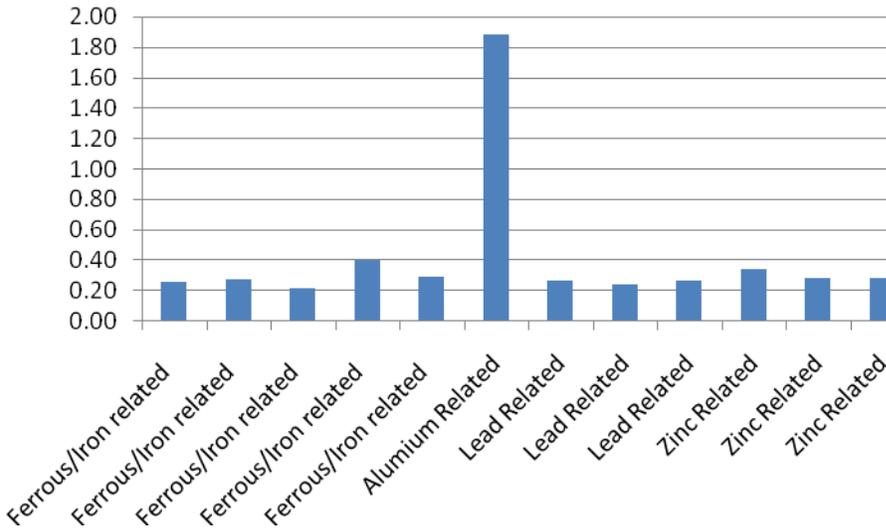
Table 15: Impact of Eliminating Export Duties on Import of Basic Metals

| Basic Metals Category | HS Codes | Price Elasticity Estimates | Estimate Standard Error | t-ratio | Scenario 1: % change in Import due to 0.29% change in the price of import | Scenario 2: % change in Import due to 5.22% change in the price of import |
|------------------------------|-----------------|-----------------------------------|--------------------------------|----------------|--|--|
| Ferrous/Iron related | 720211 | -0.90 | 0.15 | -6.19 | 0.26 | 4.70 |
| Ferrous/Iron related | 720219 | -0.94 | 0.08 | -12.43 | 0.27 | 4.92 |
| Ferrous/Iron related | 720221 | -0.74 | 0.29 | -2.53 | 0.21 | 3.85 |
| Ferrous/Iron related | 720230 | -1.39 | 0.37 | -3.79 | 0.40 | 7.26 |
| Ferrous/Iron related | 720299 | -1.02 | 0.13 | -7.64 | 0.29 | 5.30 |
| Aluminum Related | 760110 | -6.49 | 6.42 | -1.01 | 1.88 | 33.86 |
| Lead Related | 780420 | -0.93 | 0.06 | -15.43 | 0.27 | 4.85 |
| Lead Related | 790112 | -0.84 | 0.49 | -1.72 | 0.24 | 4.39 |
| Lead Related | 790500 | -0.93 | 0.10 | -8.85 | 0.27 | 4.85 |
| Zinc Related | 790600 | -1.19 | 0.09 | -12.62 | 0.34 | 6.19 |
| Zinc Related | 790710 | -0.97 | 0.04 | -22.12 | 0.28 | 5.07 |
| Zinc Related | 790790 | -0.97 | 0.06 | -17.28 | 0.28 | 5.05 |

Scenario 1: Lowering Basic Metal Relative Import Price by 0.29%

Table 15 and Chart 3 summarize the result of applying scenario 1 to the data using the estimated import price elasticities for basic metals. Chart 3 shows that, under scenario 1, aluminum import could increase by less than 2%. On the other hand, the percentage change in the import of ferrous/iron, lead, and zinc are fairly small and well below 0.5%. It is worth noting that the lack of sufficient data on copper prevents a similar statement about this product.

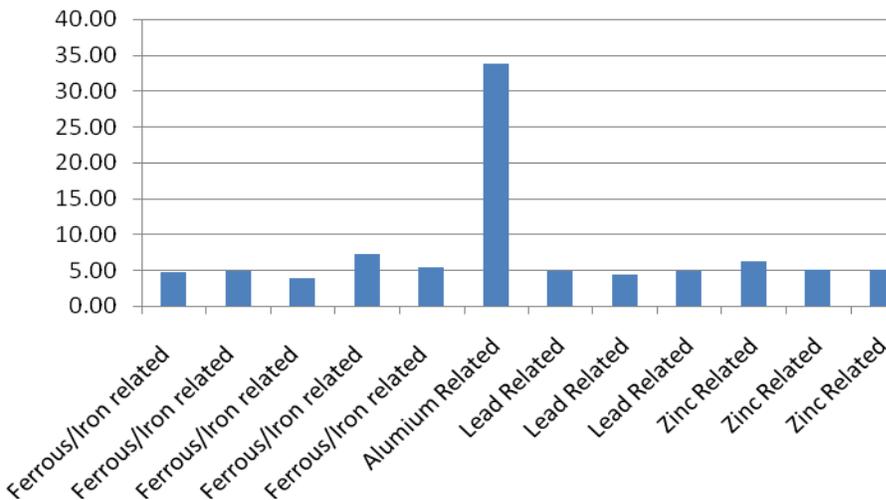
Chart 3: Scenario 1: Lowering Basic Metal Relative Import Price by 0.29%



Scenario 2: Lowering Basic Metal Relative Import Price by 5.22%

Table 15 and Chart 4 summarize the result of applying scenario 2 to the data using the estimated import price elasticities for basic metals. Chart 4 shows that under scenario 2, aluminum import could increase by less than 34%. On the other hand, the import of ferrous/iron could fluctuate between 3.8% and 7.2%; lead between 4.4%-4.8%,; and, zinc between 5.0%-6.1%. Lack of sufficient data on copper prevents a similar statement about this product.

Chart 4: Scenario 1: Lowering Basic Metal Relative Import Price by 5.22%



The above analysis shows that any percentage change in the domestic prices of basic metals leads to an identical but opposite (in sign) percentage change in the price of imported basic metals. Given this assumption, one must consider the reported estimates in Table 15 and Charts 3 and 4 as the upper bound estimates for the imports of basic metals to Azerbaijan. It is indeed reasonable to conclude that the imperfections in substituting domestic products for the imports, transportation costs, and other potential barriers may not allow for significant substitution between the imported basic metals and those produced domestically.

Case Study: *Baku Steel*

Azerbaijan's fabricated metal industry is highly concentrated and is mainly dominated by Baku Steel Company OJSC (denoted hereafter by BSC). In 2001, a favorable ban on the export of basic metals significantly assisted the basic metal users to continue their operations of producing fabricated metals, which are mainly steel billets and reinforcement bars. A beneficiary of this ban is BSC that produces low and medium carbon steel billets¹⁵ and construction reinforced bars. The monthly output of BSC is 22,000 tons. The quality of BSC output is supervised by SGS and British Standards Institute (BSI). In 2009, BSC had 1,600 employees. But this number may vary based on the demand for its product. Currently, BSC claims an annual production of 230,000 tons and 3,000 employees. BSC plans to merge with two other related companies in the same field. The two potential merging partners are: DNT with the capacity of 420,000 tons and Baki Poladtokme Asc Baku Steel Casting Jsc with the capacity of 264,000 tons. Thus, the total number of employees of the merged company may reach to 4,000. This is about 80% of the total number of people employed in the fabricated manufacturing industry. Since this (4,000 employees) is less than 50% of those working in the basic metal industry, the differential factor intensity of these two industries (i.e., fabricated metals and basic metals) becomes clear.¹⁶

BSC dominates the market for purchasing basic metals (scrap iron, etc). BSC obtains 55% to 60% of its needed basic metals from the domestic sources, which is approximated to be around 300,000 tons and imports about 20,000 tons of basic metals from Kazakhstan. BSC has an efficiency rate of 70% in the use of basic metals; that is, about 30% of scrap metals are wasted or not used in producing fabricated metals.

In 2009, the price of scrap metal input for BSC operation was estimated at \$120 per ton. Given the 70% efficiency (or input use) rate, the cost of basic metal input for BSC is estimated to be around \$156.

15 The billets are 120x120mm or 150x150mm in size with length of 6,000 – 12,000mm.

16 In 2009, 14% of the employees in either industry (the basic metal industry and the fabricated metal industry) were women.

In 2009, the official data shows that the average monthly wage in the fabricated metal manufacturing (non-state) industry was 226.8 manats, or 2721.6 manats per year. On the other hand, the average monthly wage in the basic metal manufacturing (non-state) industry was 390.3 manats, or 4683.6 manats per year.

In 2009, the interviews / news show that the products of BSC were being sold on average at \$530 per ton excluding VAT.

Inclusion of the above data and other related estimates in a spreadsheet allows for the consideration of various scenarios. An example of such an exercise is reported in Table 16:

Table 16: Case Study: Impact of Eliminating Export Duties on a User of Basic Metals

| | Current Law - with Export Duty | After Eliminating Export Duty - Increasing Basic Metals cost by 1.86% | After Eliminating Export Duty - Increasing Labor Input by a Factor 230% and Basic Metals cost by 5% |
|--|---------------------------------------|--|--|
| | | Approximating 2009 Data | Approximating 2010 Data |
| Monthly wage in the Fabricated Metal Industry, 2009 data (in manats) | 226.80 | 226.80 | 226.80 |
| Monthly wage in the Basic Metal Industry, 2009 data, (in manats) | 390.30 | 390.30 | 390.30 |
| Number of Employees in BSC | 1,300.00 | 1,300.00 | 3,000.00 |
| Price per ton of Basic Metals (in dollar) | \$156.00 | 158.90 | \$164.14 |
| Price per ton of Fabricated Output (in dollar) | \$530.00 | 530.00 | \$530.00 |
| US Dollar Per one Manat | 0.80 | 0.80 | 0.80 |
| Price per ton of Basic Metals (in manat) | 124.80 | 127.12 | 131.31 |
| Price per ton of Fabricated Output (in manat) | 424.00 | 424.00 | 424.00 |
| Monthly Production of Fabricated Metals, 2009 (in tons) | 22,000.00 | 22,000.00 | 22,000.00 |
| Production of Fabricated Metals, 2009 (in Tons) | 230,000.00 | 230,000.00 | 230,000.00 |
| Basic Metal Input from Domestic Sources (in tons) | 300,000.00 | 300,000.00 | 300,000.00 |

| | Current Law - with Export Duty | After Eliminating Export Duty - Increasing Basic Metals cost by 1.86% | After Eliminating Export Duty - Increasing Labor Input by a Factor 230% and Basic Metals cost by 5% |
|---|---|--|--|
| | | Approximating 2009 Data | Approximating 2010 Data |
| Basic Metal Input from Kazakhstan (in tons) | 20,000.00 | 20,000.00 | 20,000.00 |
| Annual Wage Cost (in manats) (A) | 3,538,080.00 | 3,538,080.00 | 8,164,800.00 |
| Annual Basic Metal Cost (in manats) (B) | 35,880,000.00 | 36,547,368.00 | 37,752,936.00 |
| BSC Total Input Cost Estimate: (A) + (B) | 39,418,080.00 | 40,085,448.00 | 45,917,736.00 |
| BSC Estimated Revenue (ER) | 121,900,000.00 | 121,900,000.00 | 121,900,000.00 |
| BSC Estimated Profit: (ER) - (A) + (B) | 82,481,920.00 | 81,814,552.00 | 75,982,264.00 |

SOURCE: State Statistical Committee, News, Others

While the reported data in Table 10 showed that the basic metal industry is a more labor intensive industry than the fabricated metal industry, Table 15 shows that those working in the basic metal industry receive higher wages than those working in the fabricated metal industry. In fact, this allows manufacturers, such as BSC, to hire their labor at 58% of the wage paid in the basic metal industry. This and the level of concentration in the fabricated industry, as well as, favorable export bans and export duties have provided a fairly robust business environment for BSC.

Reported data and estimates in Table 15 indicate that increasing labor costs (number of labor and/or wages) do not have any substantive impact on the BSC's profit. Reported estimates and analysis show that BSC's ability to earn profit under various scenarios is fairly robust. Several hypothetical scenarios that are reported in Table 15 support the notion that elimination of export duties will not significantly impact BSC and, thus, the fabricated metal industry.

Conclusion

The WTO does not ban export taxes or quantitative restrictions (banning exports), but it requires nondiscrimination and transparency in this context. The WTO also supports shifting quantitative restrictions to price-based instruments. However, the WTO members consider export bans and export duties as forms of subsidies to the domestic industries and usually demand their elimination. International trade theory provides the rationale for shifting away from export bans and, in a majority of cases, from export duties. Similarly, the world trade laws

support abolishing quantitative restrictions that hinder trade and lowers welfare. Beneficial impacts of eliminating export bans and export duties are clearly demonstrated by the economic theory and international evidence.

Economic analysis of the attempts to ban export of certain metals and/or levy and collect export duties point to the distortionary aspect of this practice in Azerbaijan. As long as Azerbaijan does not dominate a particular international market, it will not benefit from arbitrary imposing export duty on a particular good. A distortionary policy (imposing export duties) only delays the natural tendency of industries to exploit their comparative advantages within Azerbaijan and in the international markets.

Using a wide range of the short-run and the long-run export price elasticity estimates for Azerbaijan, we find that the positive impact of eliminating export duties will take place in the long-run. While the elimination of export duties on the basic metals may not lead to a significant increase in the export of underlying commodities in the short-run, the long-run elasticities support a 0.5% - 8% increase in exports for the basic metals. However, apart from zinc, the increase in the exports of basic metals in the long-run will be less than 5%. Hence, one may conclude that, at best, the impact of eliminating export duties on the basic metal producers and the economy (including those using basic metals as input) will be fairly modest.

An assessment of the impact of the elimination of export duties on the government revenue clearly indicates that this impact will be minimal, and may not exceed \$43 thousand.

Azerbaijan could benefit from a small increase in the export of basic metal (and employment) in the long-run, if Azerbaijan eliminates its export duties on the basic metals. Analysis of the data on production and employment shows that the direct beneficiary of cheaper input prices (due to the export duties on the basic metals), e.g., fabricated metal industry, do not hire as many workers as that basic metal industry. In fact, the basic metals industry is a larger employer of workers in Azerbaijan than the fabricated metal industry. Hence, an export duty may be not be effective in promoting employment, given the current division of labor among these industries.

Azerbaijan imposes export duties on a number of basic metals. Additionally, Azerbaijan has (temporarily) suspended the export of *ferrous and non-ferrous metal scraps and wastes* since April 17, 2001.

Azerbaijan's export duties are mainly used to provide cheaper input to certain products. Historically, quantitative restriction on trade was imposed to curb asset stripping (creating scrap metals) and export.

Export bans and export duties usually have unintended consequences in the short-run and/or in the long-run. In particular, export duties reduce the incentive to use more efficient technologies. In the absence of a market dominance or a highly inelastic demand, economic theory points to the distortionary aspect of restricting trade by imposing ban or export duty. If

Azerbaijan does not dominate a particular international market, it is not benefiting from the export duties that it is currently imposed on the export of basic metals.

Using a wide range of the short-run and the long-run export price elasticity estimates for Azerbaijan, this report finds that the positive impact of eliminating export duties will take place in the long-run. On the other hand, eliminating export duties on the basic metals will not lead to any significant increase in the export of these commodities in the short-run. The long-run export price elasticities support a 0.5% - 8% increase in exports for the basic metals. Apart from zinc, the increase in the exports of basic metals in the long-run will be less than 5%. Hence, at best, the impact of eliminating export duties on the basic metal producers and the economy (including those using basic metals as input) will be fairly modest.

Since the basic metal industry is a more labor-intensive than the fabricated metal industry, elimination of export ban and export duties will improve the net employment in Azerbaijan. Since the average wage in the basic metal industry is 1.7 times the average wage in the fabricated metal industry, elimination of export ban and export duties will lead to higher income, higher income tax collection, and higher consumption (welfare) in Azerbaijan.

Empirical analysis shows that elimination of export bans and export duties in Azerbaijan will have minimal impact on the government revenue and the prices of basic metals. A revenue impact assessment shows that eliminating export duties will have no appreciable revenue impact. In particular, the revenue loss (due to eliminating export duties) may not exceed \$43 thousand. Analysis also shows that the elimination of export duties on scrap metals will lead to small price increases for the users of these metals as input. In particular, the rate of growth of prices of iron (2%), copper (0.3%), aluminum (2%-3%), lead (0.7%), and zinc (5%) will be confined to 0.3% - 5%.

An investigation of the potential substitution of imported basic metals for the imports show that imports do not pose a serious challenge to domestically produced basic metals. For example, under very strict condition (i.e., with a low probability of occurrence), the import of ferrous/iron may fluctuate between almost 4%-7%. As long as imports are imperfect substitutes for the domestically produced basic metals and there are significant transportation costs for international trade, substantive substitution between imported basic metals and domestically produced metals will not take place.

A case study of available data and information on a major fabricated metal manufacturer reinforces the above findings. This case study also shows that users of basic metals are highly profitable and that their profitability is robust to changes in the parameters that represent their cost structure.

A byproduct of removing barriers to trade is the inflow of foreign direct investment. In addition to the improved efficiency, higher employment, higher average income, higher transparency, and improved welfare, elimination of export duty may lead to significant internal, as well as,

foreign direct investment in the manufacturing sector of Azerbaijan. Given the high opportunity costs in maintaining quantitative restrictions (Decree 457) and various duties on the export of basic metals, Azerbaijan is well advised to remove these trade barriers as soon as possible.

APPENDIX I

DECREE OF THE PRESIDENT OF THE REPUBLIC OF AZERBAIJAN

On temporary suspension of the export of ferrous and non-ferrous metal scraps and wastes

To strengthen the raw-material base and ensure efficient work of metallurgy in the country in accordance with the Article 19, the Customs Code of the Republic of Azerbaijan, I hereby **decree to:**

1. temporarily suspend export of ferrous and non-ferrous metal scraps and wastes from the Republic of Azerbaijan.
2. This Decree takes force at the moment of its signing.

HEYDAR ALIYEV, President of the Republic of Azerbaijan

Baku city, April 17 2001

No. 457

APPENDIX II

The list of goods subject to export customs duties during exportation from the Republic of Azerbaijan and rates of export duties

| Code | Name of goods | Additional measurement unit | Rate of export duty (in US dollars according to percent of customs value or measurement unit) |
|------------------|--|-----------------------------|---|
| | I. Primary materials; products in granular or powder form | | |
| 7201 | Pig iron and spiegeleisen in pigs, blocks or other primary forms: | | |
| 720110 | - non-alloy pig iron containing by weight 0.5% or less of phosphorus: | | |
| | -- containing by weight not less than 0.4% of manganese: | | |
| 72010110 | --- containing by weight 1% or less of silicon | kg | 1000 kg, 5 USD |
| 72010190 | --- containing by weight more than 1% of silicon | kg | 1000 kg, 5 USD |
| 72010300 | -- containing by weight not less than 0.1% but less than 0.4% of manganese | kg | 1000 kg, 5 USD |
| 72010900 | -- containing by weight less than 0.1% of manganese | kg | 1000 kg, 5 USD |
| 72012000 | - non-alloy pig iron containing by weight more than 0.5% of phosphorus | kg | 1000 kg, 5 USD |
| 720150 | - alloy pig iron; spiegeleisen: | kg | 1000 kg, 5 USD |
| 720150100 | -- pig iron, containing by weight not less than 0.3% but not more than 1% of titanium and not less than 0.5% but not more than 1% of vanadium | kg | 1000 kg, 5 USD |
| 720150900 | ---other | kg | 1000 kg, 5 USD |

| | | | |
|-------------------|--|----|----------------|
| 7202 | Ferroalloys: | | |
| | - ferro-manganese: | | |
| 720211 | -- containing by weight more than 2% of carbon: | | |
| 72021200 | --- with a granulometry not exceeding 5 mm and a manganese content by weight exceeding 65% | kg | 1000 kg, 5 USD |
| 72021800 | --other | kg | 1000 kg, 5 USD |
| 72021900 | --other | kg | 1000 kg, 5 USD |
| | - ferrosilicon: | | |
| 720221 | -- containing by weight more than 55% of silicon: | | |
| 720221100 | --- containing by weight more than 55% but not more than 80% of silicon | kg | 1000 kg, 5 USD |
| 720221900 | --- containing by weight more than 80% of silicon | kg | 1000 kg, 5 USD |
| 72022900 | --other | kg | 1000 kg, 5 USD |
| 7202300 | - ferrosilico manganese | kg | 1000 kg, 5 USD |
| | - ferro-chromium: | kg | 1000 kg, 5 USD |
| 720241 | -- containing by weight more than 4% of carbon: | kg | 1000 kg, 5 USD |
| 7202411000 | --- containing by weight more than 4% but not more than 6% of carbon | kg | 1000 kg, 5 USD |
| 720241910 | ---- containing by weight not more than 60% of chromium | kg | 1000 kg, 5 USD |
| 720241990 | ---- containing by weight more than 60% of chromium | kg | 1000 kg, 5 USD |
| 720249 | --other | kg | 1000 kg, 5 USD |
| 720249100 | --- containing by weight not more than 0.05% of carbon | kg | 1000 kg, 5 USD |
| 720249500 | --- containing by weight more than 0.05% but not more than 0.5% of carbon | kg | 1000 kg, 5 USD |
| 72024 | --- containing by weight more than 0.5% but not more | kg | 1000 kg, 5 |

| | | | |
|---------------|--|----|-------------------|
| 9900 | than 4% of carbon | | USD |
| 72025 0000 | - ferrosilicochromium | kg | 1000 kg, 5 USD |
| 72026 0000 | - ferronickel | kg | 1000 kg, 5 USD |
| 72027 0000 | - ferromolybdenum | kg | 1000 kg, 5 USD |
| 72028 0000 | - ferrotungsten and ferrosilicotungsten | kg | 1000 kg, 5 USD |
| | -other: | kg | 1000 kg, 5 USD |
| 72029 1000 | -- ferrotitanium and ferrosilicotitanium | kg | 1000 kg, 5 USD |
| 72029 2000 | -- ferrovanadium | kg | 1000 kg, 5 USD |
| 72029 3000 | -- ferroniobium | kg | 1000 kg, 5 USD |
| 72029 9 | --other: | kg | 1000 kg, 5 USD |
| | --- ferro-phosphorus: | kg | 1000 kg, 5 USD |
| 72029 9110 | ---- containing by weight more than 3% but less than 15 % of phosphorus | kg | 1000 kg, 5 USD |
| 72029 9190 | ---- containing by weight 15% or more of phosphorus | kg | 1000 kg, 5 USD |
| 72029 9300 | --- ferrosilicomagnesium | kg | 1000 kg, 5 USD |
| 72029 9800 | --- other | kg | 1000 kg, 5 USD |
| 7203 | Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or similar forms; iron having a minimum purity by weight of 99.94 percent, in lumps, pellets or similar forms: | | |
| 72031 0000 | - ferrous products obtained by direct reduction of iron ore | kg | 1000 kg, 5 USD |
| 72039 0000 | -other | kg | 1000 kg, 5 USD |
| 7204 | Ferrous waste and scrap; remelting scrap ingots of iron or steel: | | |

| | | | |
|---------------|---|----|-------------------|
| 72041 0000 | - waste and scrap of cast iron | kg | 1000 kg, 7 USD |
| | - waste and scrap of alloy steel: | kg | 1000 kg, 7 USD |
| 72042 1 | -- of stainless steel: | kg | 1000 kg, 7 USD |
| 72042 1100 | --- containing by weight 8% or more of nickel | kg | 1000 kg, 7 USD |
| 72042 1900 | --- other | kg | 1000 kg, 7 USD |
| 72042 9000 | -- other | kg | 1000 kg, 7 USD |
| 72043 0000 | - waste and scrap of tinned iron or steel | kg | 1000 kg, 7 USD |
| | - other waste and scrap: | | |
| 72044 1 | --- turnings, shavings, chips, milling waste, Sawdust, filings, trimmings and stampings whether or not in bundles (ecsc): | | |
| 72044 1100 | --- turnings, shavings, chips, milling waste, sawdust and filings | kg | 1000 kg, 5 USD |
| | --- trimmings and stampings: | | |
| 72044 1910 | ---- in bundles | kg | 1000 kg, 5 USD |
| 72044 1990 | ----other | kg | 1000 kg, 5 USD |
| 72044 9 | --other | kg | 1000 kg, 5 USD |
| 72044 9100 | --- fragmentized (shredded) | kg | 1000 kg, 5 USD |
| | ---other: | | |
| 72044 9300 | ---- in bundles | kg | 1000 kg, 5 USD |
| | ---- other: | | |
| 72044 9910 | ----- neither sorted nor graded | kg | 1000 kg, 5 USD |
| 72044 9990 | ----other | kg | 1000 kg, 5 USD |
| 72045 0 | - remelting scrap ingots (alloys): | kg | 1000 kg, 5 USD |

| | | | |
|---------------|---|----|--------------------|
| 72045 0100 | -- of alloy steel | kg | 1000 kg, 5 USD |
| 72045 0900 | --other | kg | 1000 kg, 5 USD |
| 7205 | Granules and powders, of pig iron, spiegeleisen, iron or steel: | | |
| 72051 0000 | - granules | kg | 1000 kg, 5 USD |
| | - powders: | | |
| 72052 1000 | -- of alloy steel | kg | 1000 kg, 5 USD |
| 72052 9000 | --other | kg | 1000 kg, 5 USD |
| 72061 0000 | - ingots | kg | 1000 kg, 5 USD |
| Group 74 | Copper and articles thereof | kg | 1000 kg, 15 USD |
| 7601 | Unwrought aluminum: | | |
| 76011 0000 | - aluminum, not alloyed | kg | 1000 kg, 15 USD |
| 76012 0 | - aluminum alloys: | | |
| 76012 0100 | -- primary | kg | 1000 kg, 15 USD |
| | -- secondary | | |
| 76012 0910 | --- in ingots or liquid state | kg | 1000 kg, 15 USD |
| 76012 0990 | --other | kg | 1000 kg, 15 USD |
| 76020 0 | Aluminum waste and scrap: | | |
| | - wastes: | | |
| 76020 0110 | -- turnings, shavings, chips, milling waste, sawdust and filings, waste of colored, coated or bonded sheets and foil, of a thickness (excluding any backing) not exceeding 0.2 mm | kg | 1000 kg, 15 USD |
| 76020 0190 | -- other (including factory rejects) | kg | 1000 kg, 15 USD |
| 76020 | -scrap | kg | 1000 kg, |

| | | | |
|-----------------------|--|-----------|----------------------------|
| 0900 | | | 15 USD |
| 7603 | Aluminum powders and flakes: | kg | 1000 kg, 15 USD |
| 76031 0000 | - powders of nonlamellar structure | kg | 1000 kg, 15 USD |
| 76032 0000 | - powders of lamellar structure; flakes | kg | 1000 kg, 15 USD |
| Group 78 | - Lead and articles thereof | kg | 1000 kg, 15 USD |
| Group 79 | - Zink and articles thereof | kg | 1000 kg, 15 USD |
| Group 80 | - Tin and articles thereof | kg | 1000 kg, 15 USD |