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The implications of the global financial crisis for developing countries' export volumes and values

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Acronyms

ACP	African, Caribbean and Pacific
AfDB	African Development Bank
AfT	Aid for Trade
AGOA	African Growth and Opportunity Act
CAP	Common Agricultural Policy
CAR	Central African Republic
DFQF	Duty- and Quota-free
DRC	Democratic Republic of Congo
EC	European Commission
EIA	Energy Information Administration
EPA	Economic Partnership Agreement
EU	European Union
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GM	Genetically Modified
GSP	Generalized System of Preferences
GTFFP	Global Trade Finance Program (World Bank)
ICCO	International Cocoa Organization
ICO	International Coffee Organisation
IFC	International Finance Corporation
IFS	International Financial Statistics
LDC	Least-developed Country
MFN	Most-favoured Nation
ODI	Overseas Development Institute
OPEC	Organization of Petroleum Exporting Countries
SITC	Standard International Trade Classification
UAE	United Arab Emirates
UEMOA	West African Economic and Monetary Union
UK	United Kingdom
UN	United Nations
UNCTAD	UN Conference on Trade and Development
UNDP	UN Development Program
US	United States
WTO	World Trade Organization

Executive summary

Industrialised countries are in their deepest recession since World War II and the resultant slump in demand has already seriously affected commodity prices. Global growth rates have been revised downwards and there is ample evidence that the financial crisis has reduced global demand for developing country products, thus reducing their export revenue. The European Union's (EU) biggest economies, Germany, the UK and France, recorded declines of about 30% in their food and live animal imports in October 2008 compared with October 2007.

However, no clear trend of declining EU and US demand for the single commodities analysed in this study is visible so far. The import figures are erratic and do not yet indicate a declining trend – either for total imports or for those from selected developing countries – as a response to the crisis. Since monthly trade figures are likely to show some abnormalities, we expect to observe clearer volume trends in the coming months.

In addition to declining prices and lower demand for some goods, the global financial crisis has also affected developing countries by aggravating the price volatility for some commodities, increasing revenue uncertainty for commodity-dependent countries. Moreover, South–South trade is expected to suffer, with China, India, South Korea, Taiwan, South Africa, Brazil and Argentina heading towards recession.

Which countries are most at risk?

Open economies, which are highly trade dependent and export only a small range of products to few markets, are affected most by the trade transmission mechanism. Such a characteristic applies to most African, Caribbean and Pacific (ACP) countries and also to the least developed Southeast Asian countries.

- In Vietnam, 76% of gross domestic product (GDP) is earned by exporting; in Yemen, Zambia, Ghana, Mozambique, Nigeria, Botswana, Namibia, Cambodia and Bangladesh the share is 20-40%. In most of these economies more than 80% of total exports is destined for two markets: the US and the EU (WTO, 2008).
- In Botswana, Mozambique, Namibia and Zambia, more than 80% of exports are derived from mining and related activities, notably diamonds, aluminium and copper. Declining demand and prices translate directly into decreased investment, currency depreciation and unemployment.

Even more heavily affected are those countries hit by multiple effects of the crisis, many of which also fall into the first category of undiversified and highly export dependent economies.

- Nigeria has been hit both by the rapidly declining oil price (68% within one year) and by a decrease of more than 45% in share price, resulting in a depreciation of the naira by 20% in the past two months and drastically worsened terms of trade (AfDB, 2009).
- Various countries, such as Belize, Burundi, Cameroon, Ethiopia, Ghana, Guyana and St Vincent, face multiple commodity shocks for more than 50% of their total export revenue. Many of these small economies are additionally affected by declining revenue from tourism and remittances.

Major commodity exporters from Southeast Asia, such as Thailand or Indonesia, are less affected owing to their higher degree of diversification. Particularly large developing countries that have a large domestic market and effective institutions, such as Indonesia, are less exposed to the effects of the economic crisis.

The downward trend of commodity prices harms developing country exporters …

Commodity-dependent developing country exporters are heavily affected by the financial crisis: demand from industrialised countries is declining and commodity prices have dropped drastically (though from very high levels) in anticipation of decreased global demand and economic growth. For most commodities, the World Bank has predicted the stabilisation of prices at about the 2005 level by 2010/15 – which would still be comparatively high. However, there are many uncertainties surrounding these predictions of commodity prices, not least because we do not know whether a gradual recovery in 2010, as assumed by the World Bank, is realistic. Other analysts assume an L-shaped recession, i.e. that the crisis will be followed by a long period of very low growth rates. If this proves to be the case, we can expect the demand for major commodities to decline further, which will particularly affect exporters of construction materials and simple manufactures. However, exporters of traditional commodities would also be affected; the crisis has already aggravated their problem of highly fluctuating prices.

- Construction materials such as aluminium and copper are heavily affected by the crisis since lower growth rates translate directly into decreased demand. For aluminium, prices are further held down by the fact that China is a net exporter. Metal-dependent exporters such as Zambia, Mozambique, Peru and Chile are therefore expected to be heavily affected by declining demand.
- Simple manufactured exports, such as computer equipment and clothing, are heavily affected, since their income elasticity of demand is high. Global competition is very stiff, with China leading in most product categories, which increases the risk that in times of decreasing profit margins smaller economies highly dependent on the export of these products, such as Thailand, Bangladesh or Philippines, might be squeezed out of the market by China.
- Oil exporters are heavily affected in the short term (with the price for crude oil declining sharply in the past months). However, given the global economic dependency on oil and the low usage of alternative energy resources, the World Bank expects oil prices to stabilise at about 2005 levels in the medium term.
- For some traditional agricultural commodities, such as rubber and rice, price fluctuations have been aggravated by the crisis. Other agro commodities, such as cocoa, coffee and cotton, have hardly been affected and show a low income elasticity of demand. However, the position of cocoa and coffee producers in the global value chain might worsen as a result of the crisis, offering global companies the chance to reduce further the profit margin for producers.
- Non-traditional agricultural products like fruit and nuts, vegetables and flowers, show a higher income elasticity of demand than traditional agricultural commodities. It might be the case, however, that importing countries substitute imports with domestic horticultural products as a response to the crisis. Moreover, non-traditional agricultural products might suffer from increased protectionism, e.g. in the form of more stringent product standards, 'carbon labelling' and other non-tariff barriers which are rising as a direct response to the crisis.

As can be seen from the table below, it is not only the traditional commodity-dependent African countries that are heavily affected by commodity price changes. Exports of the commodities dealt with in this report also account, in aggregate, for significant shares (35-46%) of the exports of more diversified economies like China, Chile, Vietnam or Colombia.

Countries most affected by commodity and simple manufactures price changes

Country	Products affected	Combined share of total exports (3 latest years reported) (%)
Countries affected by multiple commodity price changes		
Burundi	Gold, coffee	77.9
Cameroon	Crude oil, cocoa, cotton, aluminium	61.2
Ethiopia	Coffee, flowers, vegetables, gold	61.1
Ghana	Gold, cocoa	61.1
St Vincent and the Grenadines	Fruit and nuts, vegetables, rice	57.9
Guyana	Sugar, gold, rice	51.0
Belize	Sugar, crude oil, fruit and nuts	50.5
Papua New Guinea	Crude oil, gold, palm oil, coffee	49.4
Côte d'Ivoire	Cocoa, crude oil, natural rubber, fruit and nuts, cotton	46.9
China	Aluminium, vegetables, computer equipment, woven female clothing, copper,	46.0
Tanzania	Gold, coffee, cotton	42.8
Chile	Copper, fruit and nuts, flowers,	39.8
Uganda	Coffee, gold, flowers, cotton	39.2
Honduras	Coffee, fruit and nuts, palm oil	37.0
Nicaragua	Coffee, sugar, gold, vegetables	36.6
Vietnam	Crude oil, woven female clothing, rice, natural rubber, coffee, fruit and nuts	35.6
Colombia	Crude oil, coffee, flower, fruit and nuts, gold	34.8
Hong Kong	Gold, computer equipment, woven female clothing.	33.3
Guatemala	Crude oil, woven female clothing, coffee, fruit and nuts, sugar,	32.3
Dominica	Fruit and nuts, vegetables	30.8
Vanuatu	Palm oil, cocoa, vegetables,	30.8
Peru	Gold, copper, coffee	30.7
Dominican Republic	Fruit and nuts, sugar, cocoa, vegetables	24.3
Indonesia	Crude oil, palm oil, natural rubber, aluminium, woven female clothing, cocoa, coffee, copper	24.2
Mexico	Crude oil, gold, computer equipment, woven female clothing, coffee, fruit and nuts, flowers, copper, vegetables	21.3
Malaysia	Computer equipment, crude oil, palm oil, cocoa, natural rubber	20.8
Kenya	Flowers, vegetables, coffee	20.3
Thailand	Computer equipment, natural rubber, vegetables, sugar, rice, gold	15.7
Brazil	Aluminium, crude oil, cocoa, coffee, sugar, fruit and nuts, gold, cotton	14.2
India	Aluminium, vegetables, coffee, sugar, fruit and nuts, rice, cotton	4.8
Countries heavily dependent on a single commodity		
East Timor	Coffee	96.4
São Tomé e Principe	Cocoa	88.7
Sierra Leone	*Coffee*	*86.5*[a]
Burkina Faso	Cotton	68.7
Benin	Cotton	68.6
Zambia	Copper	67.6
Mozambique	Aluminium	60.2
Tonga	Vegetables	46.6
Algeria, Brunei, Cameroon, Ecuador, Gabon, Iran, Iraq, Kuwait, Nigeria, Oman, Papua New Guinea, Qatar, Saudi Arabia, Syria, UAE, Venezuela, Vietnam, Yemen	Crude oil	Between 20% and 96% of export revenue (see Annex 2)

Note: According to figures reported by Sierra Leone for 2002 (the only year for which data are available). This proportion seems somewhat implausible given that Sierra Leone is a major exporter of diamonds (which were not included among its reported exports in 2002), and should perhaps be treated with caution.

… but benefits importers of fuel and food

Although falling commodity prices have severe consequences for commodity-dependent exporters, they benefit importing developing countries. Thus, the financial crisis has also smoothed the effects of peaking fuel and food prices. Oil prices, which rose by 100% in the period 2005-2008, have declined from a peak of $147/barrel to $40-45/barrel as at March 2009. This has significant balance of payment implications for oil-importing developing countries, and particularly for small developing countries which have to allocate a much higher share of GDP for fuel imports than do large economies. A similar positive effect of declining prices can be observed for net food-importing countries. While the prices for palm oil, rice, maize, wheat and soybeans more than doubled in the period 2005-2008, all are now

declining as a result of shrinking global growth rates. This benefits particularly poor (urban) households which spend on average more than 50% of their income on food.

Moreover, lower prices help to reduce inflation (which is running in double figures in many developing countries). The depreciation of the exchange rate can also help to improve the competitiveness of producers, as the low value of the local currency might further stimulate consumption of domestically produced products at the expense of imports.

However, the recent depreciation of commodity and fuel prices is to some extent outweighed by the appreciation of the US dollar, which gained 8% against the euro and 26% against the pound sterling in the period 1 October 2008 to 30 March 2009. Developing countries' depreciation of their currencies vis-à-vis the dollar in order to improve their competitiveness and raise the domestic value of their exports results in increased costs of external debts. Thus, while a year ago developing countries faced the beneficial combination of a weak US dollar and high commodity prices, the situation is now reversed – which increases the financial pressure on them considerably.

Differences and similarities compared with the 1997 Asian crisis

Declining consumption and a loss of confidence in the market, with resultant negative effects on demand for developing country exports and their terms of trade, are common to both crises. However, while Asian countries exported largely to the region and had to redirect exports to the US and the EU as a response to declining regional demand and prices, it is now the US and EU markets that are heavily affected by the crisis. Owing to the global dimension of the financial crisis and developing countries' heavy dependence on the EU and the US markets, the options for market diversification are very limited.

In both crises, developing country currencies have tended to devalue vis-à-vis the US dollar. Surprisingly, we are now seeing a sharp appreciation of the US dollar in foreign exchange markets.[1] Whether the tendency to devalue helps to improve the position of developing country exports depends on the type of the product and the competition situation. During the Asian crisis, it was generally expected that the export sector would recover rapidly as a result of the harsh currency depreciations vis-à-vis leading currencies. However, these expectations underestimated the relevance of imported materials for exports and the adjustment problems of small- and medium-sized suppliers at the bottom of the value chain.

The shortage of trade finance was a severe problem during the Asian crisis, particularly for manufacturing industries. It also appears to be a problem for many firms now, although the extent to which companies are exposed to the problem of availability and cost of credit for export finance depends very much on the nature of the value chains within which they operate.

Policy responses

Declining revenues for commodity exports and lower import bills for food- and fuel-importing countries are the most obvious trade effects, but there are further trade-related effects as a result of the economic crisis. Countries that are dependent on trade tariffs for revenue, such as Bangladesh, fear that the decreased demand for imports might severely affect resource mobility. Developing countries' revenues are further affected by lower growth rates and, thus, lower tax revenues. This is likely to aggravate current macroeconomic imbalances and increase external debt levels. Many countries' ability to act is constrained by their significant currency depreciations vis-à-vis the US dollar, which

1 The fact that the US, as the main initiator of the crisis, is not penalised by exchange rate losses is explained by US investors shifting money back to US government bonds.

increase the costs of debt serving and imports. Additionally, the costs of borrowing have been increased and conditions have become more stringent.

It is almost impossible in times of decreasing global demand and falling prices to expand export volumes to compensate for revenue losses. For exporters of manufactured products, such a strategy is further constrained by industry's high dependency on raw material imports, which are difficult to finance owing to weakened domestic currencies and restricted trade finance conditions.

Developing countries are well aware of the risk of expanding volumes in an economic downturn. Thus periods of low prices for major commodities are rarely accompanied by export expansion – a fact confirmed by the literature (see Page and Hewitt, 2001). Commodity price booms, on the other hand, are responded to by increased volumes – although only by major suppliers. Small commodity exporters are often not able to expand their volumes owing to supply-side constraints.

Some countries have already applied 'beggar thy neighbour' policies as a response to the crisis. The depreciation of the currencies of large economies like India, Brazil, Chile, South Africa and Nigeria vis-à-vis the US dollar is at the expense of small neighbouring countries, which do not have the fiscal policy space to devalue their currencies. Moreover, some countries have raised several forms of protectionist measures – including tariffs, non-tariff barriers and subsidies.

In addition to these defensive trade policies, many countries have also pursued offensive policies such as credit guarantees to support exports or the introduction of fiscal stimuli programmes. However, many developing countries are constrained by their weak fiscal positions, unsustainable debt levels and high aid inflows, which require fiscal prudence, thus limiting considerably the scope of interventionist policies.

Recommendations

Fighting protectionist tendencies

It is widely acknowledged that many developing countries need additional financial and technical support now more than ever, and that donor countries should ensure that their aid commitments are met – particularly in times of crisis. Moreover, developing countries need open export markets to help them to mitigate the negative effects on their economies. Protectionist measures in developed countries will mete out additional punishment to these most vulnerable developing economies. It is therefore disturbing to see new protectionist measures emerging in the US and the EU, such as increased subsidies for agriculture, bailouts for the car industry and thoughts about expanding product standards.

The impact of protectionist measures on global welfare is magnified by the fact that, in today's highly interdependent global economy, protectionism will hurt not only exporters of the final product but also those in several other countries involved in its production process. International trade policy priorities for G-20 countries should be to resist domestic pressures to apply protectionist measures and openly oppose such measures taken by any other G-20 member. Moreover, countries are called upon to support the surveillance process that the World Trade Organization (WTO) has put in place to track new protection measures applied by members and encourage it to cover a broad range of potentially distorting measures. G-20 members need to coordinate their fiscal stimuli programmes so as to minimise 'beggar thy neighbour' policies and to refrain from imposing any conditions in these programmes that discriminate against foreign firms.

Ensuring sustained trade finance

Large developing countries, such as Brazil, India and Argentina, together with the WTO and the World Bank, have raised serious concerns about trade finance. Consequently, the World Bank has expanded existing programmes and introduced new ones to improve trade liquidity. However, the importance of

trade finance differs significantly among developing countries and sectors, depending on their position in international value chains. In Africa, for instance, we do not yet have much evidence that the lack of trade finance is a serious problem for exporters. So, although it is important that trade finance be secured, it should be provided only if exporters' access to trade finance is a serious problem; otherwise it is likely to crowd out domestic banks.

Providing effective and timely Aid for Trade

The global financial crisis increases developing countries' need for effective and timely Aid for Trade (AfT). They are being affected by a combination of falling export volumes and prices and depreciations of currencies; for many countries, the consequence will be worsening trade deficits, fiscal challenges and increased foreign debt levels. The G-20 countries need to renew their AfT commitments and make clear that AfT funds will be increased without reducing other aid commitments. This requires a consistent definition of AfT to ensure that existing aid activities are not simply relabelled.

As well as ensuring that *additional* funds are available to support developing countries in coping with the effects of the global financial crisis, it is necessary to ensure also that these funds respond *adequately* to countries' needs. This will require developing countries to exercise strong leadership and donors to give centrality to national development plans. The AfT framework needs to be tightened up to ensure that the aid is adequate, and provided in an appropriate and timely way to deal with the actual, new costs resulting from the crisis.

Offering more generous rules of origin

Though the EU and US markets are largely open to exports from small developing countries, these are still constrained by restrictive rules of origin – particularly in the case of agro-processed products. If the EU and the US set low domestic value-added thresholds for least developed countries (LDCs) and selected free trade agreement (FTA) partners in developing countries, this would give a powerful signal that could help to stimulate investment and expand and diversify the exports of small developing countries – which in turn would help to mitigate the negative impact of the crisis. As the US's African Growth and Opportunity Act (AGOA) initiative and the EU's permitting Pacific economic partnership agreement (EPA) states to process fish outside their waters without losing originating status have shown, changed rules of origin for a few product lines can make a big difference.

1. Introduction

Industrialised countries are in their deepest recession since World War II and the resultant slump in demand has already seriously affected commodity prices. In March 2009, global growth rate predictions were revised downwards again to -0.5 to -1% on an annual average basis (IMF, 2009a).[2] Past financial crises affecting developing countries have often been regional (with speculative attacks affecting a few countries and contagion effects spreading little beyond their neighbours), but the effects of the current crisis are much more global: nearly all countries will be affected. For developing countries, trade is a key transmission mechanism, linking them to markets that are heavily affected by the financial crisis via changed terms of trade and export demand.

There is already ample evidence that the financial crisis is slowing global demand for developing country products, thus reducing their export revenue. The European Union's (EU) biggest economies, Germany, the UK and France, recorded declines of about 30% in their food and live animal imports in October 2008 compared with October 2007 (UN Comtrade). South–South trade is also expected to suffer, with China, India, South Korea, Taiwan, South Africa, Brazil and Argentina heading towards recession (Capital Economics, 2009).

Moreover, the price decline and associated price volatility for many products exported by developing countries add to the risk of suffering export revenue losses. The prices for crude oil and copper, and also for food exports, have declined dramatically (though from a very high recent level).

This paper investigates which countries and products will be most vulnerable as a result of the crisis and the possible national and international trade policy responses to mitigate the effects. After a secondary literature review on how trade is expected to respond in a crisis, what happened to trade during the 1997 Asian crisis and to what extent these developments can be compared with the global financial crisis (Section 2), we undertake an empirical analysis of developing countries' most relevant export products (Section 3). Price and volume trends are analysed to assess which products and countries will be most affected by the current economic downturn. Section 4 analyses the policy implications for the most affected countries and discusses possible mitigation strategies on a national and international level.

2 For 2010, growth is predicted to pick up again to 1.5-2.5% (down from the 3% predicted in January 2009).

2. Trade effects in times of crises

In order to assess the implications of the current financial crisis for developing countries' trade it is important to start by asking what we should expect to see happening and to examine the extent to which these theoretical predictions have been have been proved correct in past crises.

2.1 Effects on prices and volumes

Many developing countries depend on the export of few commodities for the bulk of their export revenue. The elasticity of the commodity's demand in the importing country is therefore an essential element of how an economic crisis affects their export revenue.

Fuel and mining products are highly responsive to global gross domestic product (GDP) changes. A lower utilisation of production capacities translates directly into reduced demand for these products. Since the production of fuel and mining products is fixed in the short run, the oversupply depresses the price further. *Agriculture products* are generally income inelastic; the more the good is a basic necessity, the lower its income elasticity of demand. This applies to food products but generally also includes products like tea and coffee.

Many traditional agricultural exporters have diversified into non-traditional agricultural exports, such as exotic fruits and fresh vegetables, which are generally perceived to be less affected by volatility in terms of trade and to reap higher export revenues (AfDB, 2004). Similarly, traditional food items where value had been added, such as 'fair trade coffee' or 'organic cocoa', are less affected by volatile commodity prices. However, in times of crisis the income elasticity for these 'luxury' agricultural items is higher than for basic crops and they are likely to be substituted by domestic goods or canned products. The deeper the crisis, the more likely it is that traditional agricultural products will also be affected by decreasing demand. The Asian crisis resulted in reduced demand for coffee, palm oil, rice, sugar, rubber, cocoa and tea (Barichello, 1999).

As for fuel and mining products, developing countries' possible volume response for agricultural products is slow. Because of the nature of production, countries are able to respond to lower prices only at the next harvest, which bears the risk of depressing prices further through supply overhangs.

Developing country *manufactured goods*, such as clothing or electronics, show an income elasticity of demand >1, i.e. a certain percentage decline of income in the export market will lead to a larger percentage decline in demand for manufactured goods. Many Southeast Asian countries depend on the export of simple manufactures for the bulk of their export revenue. As discussed by the UN Conference on Trade and Development (UNCTAD, 2002), the concentration on an outward-oriented industrialisation strategy based on simple manufactured exports carries a similar risk of fluctuating and deteriorating terms of trade as the export of primary products, because developing countries with large supply capacities are able to produce labour-intensive high-quality products at lower cost than small developing countries can. Subsequently, global competition for simple manufactured goods is very high, exerting a downward influence on prices and terms of trade.

An economic crisis affects developing country manufactured exports not only because of the high income elasticity of demand for manufactured products but also because of their high dependency on imported inputs. The sourcing of inputs for manufactured exports might be severely constrained by depreciated currencies and restrictive trade finance conditions, as experienced by Southeast Asian exporters of computer and electronic equipment during the 1997 crisis (Boorman et al., 2000; Ernst, 1999).

It needs to be borne in mind that the income elasticities of developing country exports depend not only on the composition of their export products but also on their destination. Virtually all fuel and mining exports go to unspecified world markets and are heavily dependent on changes in world GDP. For agricultural exports, however, it depends: least-developed countries (LDCs) and the ACP group (African, Caribbean and Pacific) enjoy duty- and quota-free (DFQF) market access to the EU, where the agricultural market is regulated by the Common Agricultural Policy (CAP). Most EU agricultural products have price levels that are considerably above those on the world market and are stabilised by interventionist policies, which makes the EU an attractive destination for LDC and ACP agro-exports. Preferential market access (albeit less good than for LDCs/ACP) is also granted to a range of countries from Latin America and Eastern Europe under the special incentive arrangement for sustainable development and good governance in the EU's Generalized System of Preferences (GSP+), as well as to developing countries with which the EU has entered into free trade agreements (e.g. South Africa, Chile, Mexico, North African and Middle East countries).

In order to assess to what extent agro-commodity exporters are affected by a crisis, it is therefore important to review the preferential price conditions they might enjoy for selected products (and volumes) in their main export market. Countries that do not enjoy any preferences and are directly affected by lower world market prices for their main commodities might respond with higher export volumes. However, as noted above, exporters of fuel/mining and agricultural products cannot expand their volumes immediately. And the ability of manufactures exporters to expand export volumes might be constrained by producers' high dependency on imported inputs. Generally, the expansion of export volumes in times of crisis runs the risk of resulting in a further worsening of the terms of trade. This is the case not only for primary commodities but also for simple manufactured products (UNCTAD, 2002). Another possible policy response to declining commodity prices and lower demand would be the devaluation of the domestic currency *vis-à-vis* that of the major competitor in order to improve the export competitiveness of the commodity-exporting country and to raise the domestic value-added of exports. This, however, also increases the price of imports and the costs of external debt.

The immediate impact of declining export volumes and values on the poor depends to a large extent on the employment effects and direct linkages of export-oriented industries to domestic industries. The fewer the number of people who work in export-oriented industries and the more isolated these are from domestic industries (as is the case, for instance, for Cambodia's and Lesotho's garment industries), the less their decline will affect domestic industries and services, and thus the poor. However, the closure of companies will impact government revenue negatively, which might have adverse implications for social spending programmes. Moreover, the crisis is likely to affect the costs of living of the poor in the medium term, as observed in Indonesia as a response to the 1997 crisis (Levinsohn et al., 1999). This is because domestic producers increase their prices as a response to more expensive imports. Since the poor spend a much larger share of their income on food, they are more heavily affected by rising prices.

2.2 Differences and similarities compared to the 1997 Asian crisis

The Asian crisis exhibited similar symptoms of malaise to the current one, in terms of inflated asset prices. It is generally acknowledged that financial sector vulnerability lay at the root of the Asian financial crisis, which is again similar to the current crisis. However, the major difference between the two is that in the case of the current crisis developing countries are not part of the problem; its origins lie almost exclusively in the US and UK financial markets. Still, most developing countries will be affected directly by their exposure to international financial markets and almost all of them will be affected indirectly by 'second-round' transmission mechanisms such as trade, remittances and aid.

Common characteristics of both the 1997 Asian crisis and the current crisis are a decline in consumption and a loss of confidence in the market. Despite financial stimulus programmes in the US and Euro-zone markets, consumer confidence continues to fall and consumption is declining (Capital

Economics, 2009). This may affect particularly demand for luxury products such as exotic fruits or flowers from developing countries.

A heavy reliance on the EU and US market is prevalent in many developing countries. This has helped them to compensate for insufficient domestic demand and to escape from competition in regional markets (where largely the same products are produced). However, in the current situation, the dependency on EU and US markets has the disadvantage that reduced demand can hardly be offset by channelling exports into alternative export markets.

The situation during the 1997 crisis was exactly the opposite: Asian countries exported largely to the region and had to redirect exports to the US and the EU as a response to declining regional demand and prices. However, owing to the region's price competitiveness (as a result of the devalued exchange rate) and its substantial surplus production, the EU and US markets felt threatened by this redirection of exports and responded with increasing trade restrictions (Ernst,1999).

The exchange rate adjustments were very heavy during the Asian crisis. The Indonesian rupiah lost almost 80% of its value between 1997 and 1998 and other Asian countries also experienced heavy depreciations of their currencies. Deflationary pricing pressures dominated most simple manufactured exports, such as garments, apparels and electronics.

In the current economic crisis, we are seeing similar (though less drastic) tendencies by major developing countries, such as Brazil, Argentina, South Africa and India to devalue their currencies vis-à-vis the US dollar and the euro (while China has kept the renminbi fixed to the US dollar). All African currencies except Angola's have depreciated vis-à-vis the US dollar in the past year (AfDB, 2009).[3] Additionally, we have seen, surprisingly, appreciation of the US dollar in foreign exchange markets since the start of the crisis.[4] The US dollar gained 8% against the euro and 26% against the pound sterling in the period 1 October 2008 to 30 March 2009, which has to some extent offset the recent depreciation of commodity and fuel prices, so that commodity exporters' losses/commodity importers' gains are less pronounced. However, as pointed out by Toporowski (2009), the appreciation of the dollar is of little benefit for most developing countries, since they are often net debtors in the international financial system, which is denominated largely in dollar terms. Developing countries' depreciation of their currencies vis-à-vis the dollar in order to improve their competitiveness and raise the domestic value of their exports has resulted therefore in increased costs of external debts. Thus, while a year ago developing countries faced the beneficial combination of a weak US dollar and high commodity prices, the situation is now reversed – which increases the financial pressure on them considerably.

Whether the tendency to devalue helps to improve the position of developing country exports depends on the type and the competition situation. During the Asian crisis, it was generally expected that the export sector would recover rapidly as a result of the harsh currency depreciations vis-à-vis leading currencies. Expectations were high in the electronics industry, a major engine of export-led growth in the region. However, these expectations underestimated i) the relevance of imported materials for exports and ii) the adjustment problems of small- and medium-sized suppliers at the bottom of the value chain. Small developing country manufacturers were squeezed from two sides: first, from the demand side, by international companies that demanded lower prices; and second, from the supply side, by higher costs for imports (as a result of devalued currencies). Small companies faced a shortage of credit and were negatively affected by the currency devaluation so that their costs of imported

3 The percentage loss of most currencies vis-à-vis the US dollar is in double figures; in the case of Zambia, the value loss in the past two years has been 70%.

4 This is explained by the fact that US investors are selling off many risky assets all over the world and shifting money back to US government bonds, resulting in a sharp appreciation of the dollar and a decline in interest rates of US government bonds.

materials drastically increased. The increased price of imported goods outweighed in many cases the posited boom in exports (Allen, 2003; Boorman et al., 2000; Ernst, 1999).[5]

A shortage of trade finance is also likely to be a problem during this crisis, especially for manufacturing industries. Generally, trade is particularly vulnerable to a lack, or more restrictive conditions, of finance. The extent to which companies are exposed to the problem of availability and cost of credit for export finance will, however, very much depend on the nature of the value chains within which they operate. It is reported that trade finance has been cut back in several countries, such as Argentina, Brazil, Thailand, and Hong Kong (TPU, 2009). The same has not yet been reported in Bangladesh and Indonesia, which might be explained by the greater influence of their governments on the banking system (te Velde, 2009).

5 Bank-financed credits available in Korea declined by around 50% and in Indonesia from $6 billion to $1 billion. Sharp declines in trade finance were also observed in Russia, the Philippines and Thailand in 1997-1998 and in Turkey in the 2000-2001 crisis (Allen, 2003).

3. Past, current and future effects: An empirical analysis of trade prices, volumes and values

The economic downturn has translated into decreased global demand and reduced prices for virtually all commodities. Many developing countries are highly dependent on few commodities for their export revenue. This section assesses how commodity prices developed in the past decade, how major developing country exporters of these commodities responded to changing prices and how their unit prices developed. Based on these considerations and price projections for the near future, an analysis has been made of the commodities and countries most affected by the crisis.

3.1 Methodology

According to UNCTAD (2008), developing countries' main exports cover 242 products at the Standard International Trade Classification (SITC) 3-digit level. Selecting from these products only those that account for the bulk of developing countries' total exports (such as the 'top 10') would run the risk of excluding small developing countries which do not contribute significantly to total exports – but which are highly dependent on the respective commodity for total export revenue.

We therefore chose a range of mineral, agricultural and manufacturing products that form a significant proportion of total developing country exports *and* contribute significantly to the total export revenue of individual developing countries according to secondary literature sources.[6] These products are:

- *Metals and minerals*: Aluminium, copper, gold and crude oil;
- *Other raw materials*: Natural rubber;
- *Traditional agricultural commodities*: Cocoa, coffee, cotton, palm oil, rice and sugar;
- *Non-traditional agricultural products*: Vegetables and vegetable products, fruit and nuts and flowers;
- *Labour-intensive manufactured products*: Telecommunication equipment parts and female woven clothing.

Based on this selection the section identifies: i) which developing countries are the main exporters of these products and ii) which developing countries are highly dependent on the export of these products.[7]

In a second step, we look at these countries' export volumes, export values and unit price developments for the specified products for the period 1998-2007.[8]

Unfortunately, it is not possible to assess monthly export volume and value trends by means of this exercise since countries report to the UN's Comtrade database only on an annual basis (no country has yet reported for 2008). However, by identifying i) the latest price developments for major commodities; ii) the main developing country exporters and the most dependent developing country exporters; and iii) their export volumes, values and unit prices, we have been able to assess which countries are most at risk.

6 UNCTAD (2008); World Bank (2009a); WTO (2008).

7 The 'developing countries' covered in this analysis are those listed as such in the UN Development Program's (UNDP) Human Development Report 2007/2008 – with the exclusion of Cyprus, Turkey, Singapore and South Korea, and the addition of the Cook Islands and Niue. The resultant list of 135 countries is given in Annex 4. However, not all are reporters to the UN's Comtrade database; of those that are reporters, some have not reported in SITC Rev. 3 and/or in the past 10 years. The countries on which the analysis in this section is based are indicated in Annex 4.

8 Where possible (see footnote above and Annex 4), three-year average figures have been used. Where only one or two years of data were available, that was all that could be used.

For those products and countries having been identified to be most at risk the latest export volume and price developments are assessed using EU and US 'mirror data'. In this way, we will be able to identify whether the crisis has already translated into lower demand and/or prices from these markets. However, it needs to be borne in mind that monthly figures might show some abnormalities and are not as reliable as annual figures.

3.2 Metals and mineral: Aluminium, copper, gold and oil

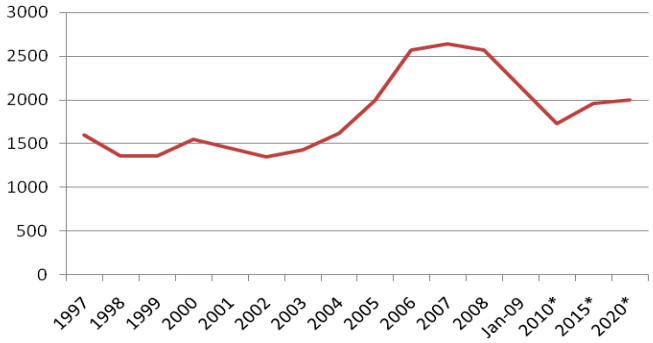
Demand for metals and minerals increased in the past decade owing to global growth. However, the driving factor for increased prices was the lack of supply in these sectors. Mineral and oil companies have not invested in new capacities and have met the growing demand largely by reviving their idle capacities. When demand increased further at the beginning of the century supply could not keep up and prices increased (World Bank, 2009a).

3.2.1 Aluminium (SITC 684)

Aluminium prices increased by more than 30% in the period 2005 to 2007, to $2638/metric tonne. Since 2007, the price has declined, and is currently about $2150/metric tonne. As a result of the economic crisis, global demand is expected to decline further. Only beyond 2010 does the World Bank expect prices to recover, although to a significantly lower level than that prior the crisis; they are projected to reach about same price level as in 2005 by 2020 (see Figure 1).

China accounted for 34% of global aluminium exports in the period 2005-2007, with Brazil and South Africa accounting for an additional 14% and 11%, respectively. Mozambique, the fourth most important exporter, is by far the most dependent exporter – with aluminium accounting for more than 60% of its total export revenue (see Table 1).

Figure 1: Aluminium – price developments 1997-Jan. 2009 ($/metric tonne)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Table 1: Aluminium – Main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				**Most dependent developing country exporters (>= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
China	2005-2007	6104	33.9	Mozambique	2005-2007	1313	60.2
Brazil	2005-2007	2471	13.7	Bahrain	2005-2007	1312	11.3
South Africa	2005-2007	1956	10.9	Cameroon	2004-2006	133	4.7
Mozambique	2005-2007	1313	7.3	South Africa	2005-2007	1956	3.6
Bahrain	2005-2007	1312	7.3				
Venezuela	2004-2006	993	6.2				
UAE	2004-2006	622	3.9				
Indonesia	2005-2007	643	3.6				
India	2005-2007	611	3.4				

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

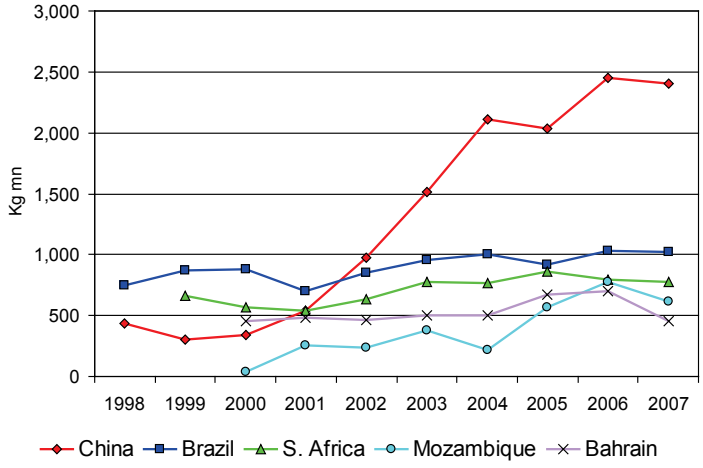
Mozambique was able to expand its export quantities in the period 2000-2007 by an annual average of 49%, thus heavily benefiting from the price increases. This boosted its export revenue by almost 400% every year (from just over $4000 in 1999 to $1516 million in 2007). Bahrain, South Africa and Brazil increased their volumes only slightly, which suggests that they were unable to respond to the booming aluminium prices. China, however, the largest aluminium producer and a net exporter, had the capacity to increase its supply by over 20% p.a., thus multiplying its benefits from high aluminium prices (see Figure 2 and Annex 1).

Exporters' unit prices developed similarly, showing a sharp increase since 2005. However, the unit price for the most dependent exporter, Mozambique, increased less sharply, and the disparity between it and China's unit value has doubled in the past decade (see Figure 3).

3.2.2 Copper (SITC 682)

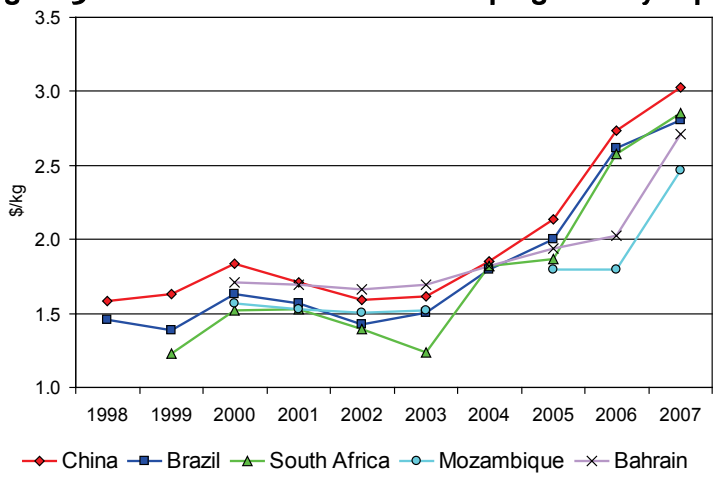
Copper prices peaked in 2007 at $7118/metric tonne, a 120% increase over the 2005 level. Since then, prices have declined drastically to a current level of about $4980/metric tonne, owing to reduced global demand (from China, and also the US and EU car and construction sectors), rising stocks and the appreciation of the US dollar. The lowest forecast price level is expected to be reached in 2015; this would, however, still be about the 2005 price (Figure 4).

Figure 2: Aluminium – Selected developing country exports, 1998-2007 (kg million)



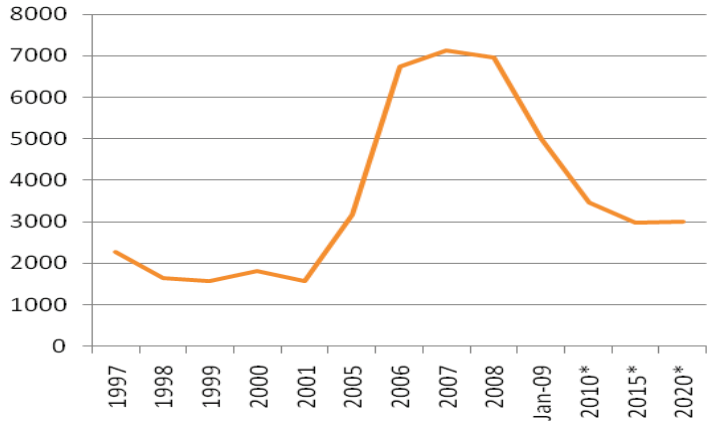
Source: UN Comtrade database (January 2009).

Figure 3: Aluminium – selected developing country export unit values, 1998-2007 (US$/kg)



Note: An anomalous 'outlier' ($4.3/kg for Mozambique in 2004) omitted.
Source: Calculated from value/quantity data from UN Comtrade database (January 2009).

Figure 4: Copper – price developments 1997-Jan. 2009 (US$/metric tonne)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Chile accounted for almost 50% of developing country copper exports in 2005-2007, and is also highly dependent on this commodity (which was responsible for 35% of the country's export revenue during the period). China and Peru are the second and third biggest developing country global exporters, respectively, although of the two only for Peru does copper account for a significant share of total export revenue (see Table 2). The fourth biggest exporter, Zambia, is by far the most dependent economy: almost 68% of its export revenue is earned from copper.

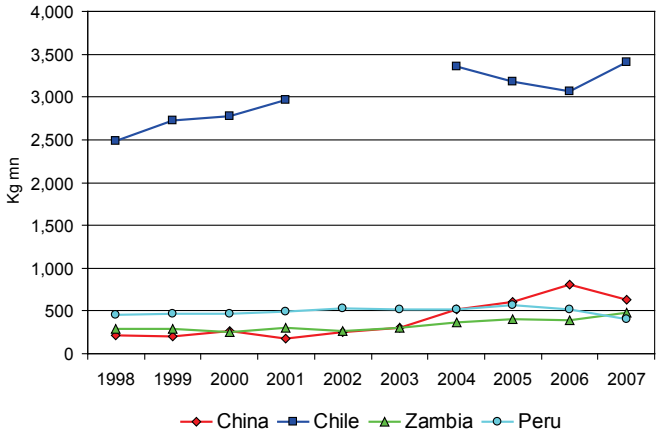
Table 2: Copper – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				**Most dependent developing country exporters (>= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Chile	2005-2007	18,644	49.2	Zambia	2005-2007	2,299	67.6
China	2005-2007	4,187	11.1	Chile	2005-2007	18,644	34.9
Peru	2005-2007	2,873	7.6	Peru	2005-2007	2,873	12.5
Zambia	2005-2007	2,299	6.1	Namibia	2005-2007	127	3.8
India	2005-2007	2,238	5.9				
Indonesia	2005-2007	1,816	4.8				
Mexico	2005-2007	1,296	3.4				

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

As is apparent from Figure 5 and Annex 1, exporting countries' response to the commodity boom was limited. Despite a doubling of prices, both the major exporter (Chile) and the most dependent exporter (Zambia) increased their export volumes only moderately (by 4% and 6% p.a. respectively) in 1998-2007. One possible explanation might be that most of the demand increase was from China, which met a large proportion of this from its own production.

Figure 5: Copper – selected developing country exports, 1998-2007 (kg million)

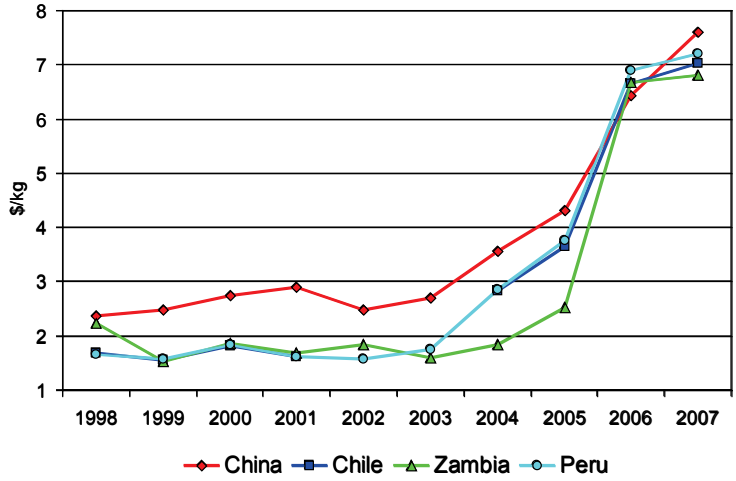


Source: UN Comtrade database (February 2009).

All countries experienced very large increases in their unit values, which rose on average by 15% p.a. Unlike aluminium, the unit values of Chile and Zambia (respectively the main and most dependent exporter) have developed almost identically (Figure 6). The difference in unit price between China and the other countries has reduced in recent years, which might be explained by a global demand overhang for copper.

Increasing demand for metal has in the past been driven by China's investment and manufacturing boom. Global price developments for metals will therefore depend significantly on the future expansion of China's manufacturing capacities and the metal intensity of its production (World Bank, 2009a). In the short run, it can be expected that low global growth rates will directly translate into decreased demand for metals.

Figure 6: Copper – selected developing country export unit values, 1998-2007 (US$/kg)



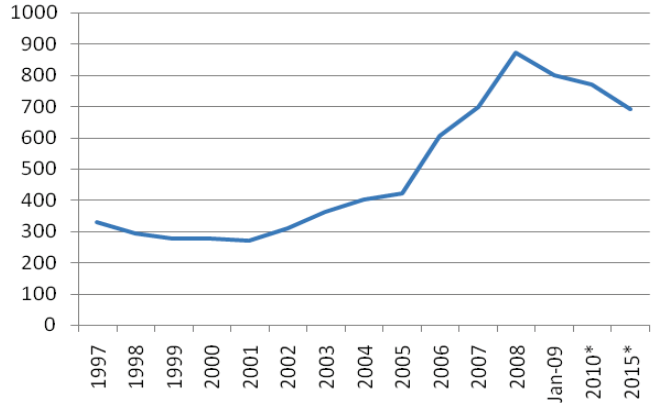
Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.2.3 Gold (SITC 971)9

Gold prices reached their annual highest level in 2008 at $872/troy ounce, almost double the level in 2005. 2009 prices are forecast to remain at a very high level (of about $820/troy ounce), owing to investors' concerns about currency volatilities.[10]

9 SITC 971 = gold non-monetary excluding ore.
10 See http://investing.thisismoney.co.uk/companyresearch/53216/Gold/company_research.html.

Figure 7: Gold – price developments 1997-Jan. 2009 (US$/troy ounce)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Hong Kong and Peru are the main developing country exporters, accounting together for about 42% of global developing country gold exports. LDCs Mali, Burundi, Tanzania and Ghana are the most dependent exporters, with gold accounting for between 32% (Ghana) and 72% (Mali) of their total export revenue (Table 3).
As can be seen from Figure 8 and Annex 1, Peru and Hong Kong were able to respond to the price boom with increased volumes, while Mali's and Ghana's exports declined. Burundi, Guinea, Niger, Mongolia and Guyana also increased their export volumes (albeit from a very low level), which suggests that their ability to expand gold exports is limited.

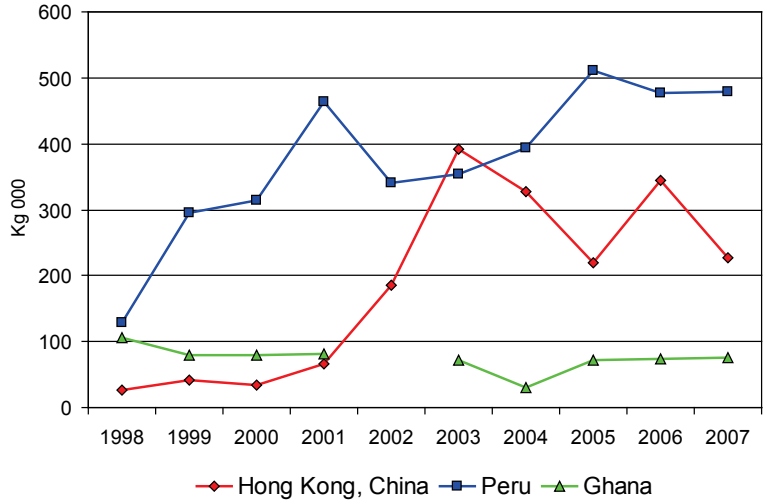
The gold unit value varies greatly from country to country. The main developing country exporter, Peru, has the lowest unit value – about 50% lower than Hong Kong's in 2007 (Figure 9). The unit values of the most gold-dependent economies developed broadly in line with that of Hong Kong, although the data show some inconsistencies (as the case of Ghana in Figure 9 demonstrates).

Table 3: Gold – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				**Most dependent developing country exporters (>= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Hong Kong, China	2005-2007	4043	21.9	Mali	2005-2007	969	71.9
Peru	2005-2007	3751	20.3	Burundi	2005-2007	64	47.8
Ghana	2005-2007	1151	6.2	Tanzania	2005-2007	572	32.9
Mexico	2005-2007	1012	5.5	Ghana	2005-2007	1151	31.8
Mali	2005-2007	969	5.3	Guinea	2000-2002	115	21.3
Thailand	2005-2007	783	4.2	Hong Kong, China	2005-2007	4043	19.9
Papua New Guinea	2002-2004	434	4.1	Papua New Guinea	2002-2004	434	19.7
Colombia	2005-2007	752	4.1	Mongolia	2005-2007	279	18.6
UAE	2004-2006	625	4.0	Guyana	2005-2007	106	17.3
Brazil	2005-2007	637	3.4	Peru	2005-2007	3751	16.4
Tanzania	2005-2007	572	3.1	Niger	2005-2007	56	14.5
				Lebanon	2004-2005/2007	205	10.4%

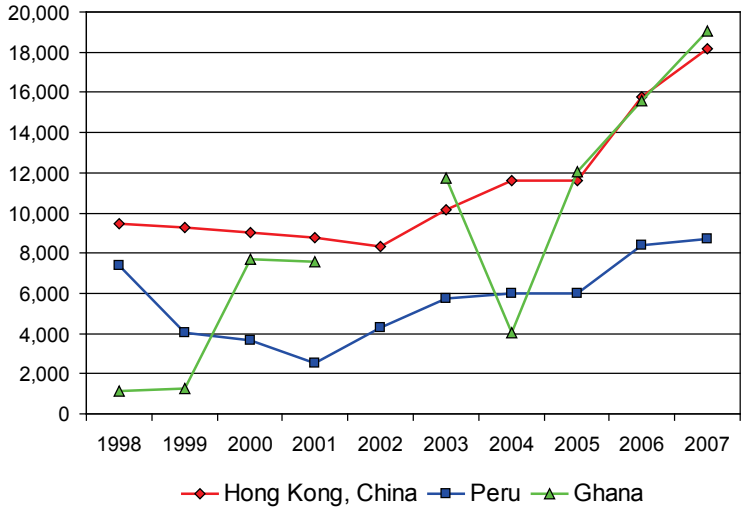
Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

Figure 8: Gold – selected developing country exports, 1998-2007 (kg 000)



Source: UN Comtrade database (February 2009).

Figure 9: Gold – selected developing country export unit values, 1998-2007 (US$ 000/kg)

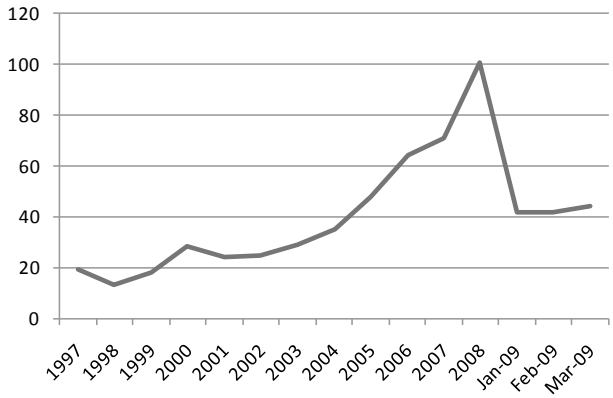


Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.2.4 Crude oil (SITC 333)

The price for crude oil increased by 100% in the period 2005-2008, peaking at over $140/barrel in mid-2008 (see Figure 10). The World Bank expects the drastic decline since October 2008, owing mainly to falling US demand, to be temporary, and oil prices are projected to recover and stabilise at about $80-85/barrel by 2015/2020. The main explanatory factors for this forecast are continued high demand, high production costs of new supplies and political instabilities in the major supplying countries (World Bank, 2008c). So far, we have not seen sufficient policy and technological changes that would have made alternative energy resources sufficiently competitive and would have a lasting negative impact on the price for crude oil.

Figure 10: Crude oil – price developments (average spot) 1997-Jan. 2009 (US$/barrel)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Saudi Arabia, Venezuela, Iran, United Arab Emirates (UAE) and Nigeria account for about three-quarters of developing country exports.[11] All of them are also highly dependent on oil, which accounts for 46-93% of their total export revenue. As can be seen from Table 4, there are also a number of smaller oil exporters that are highly dependent on oil as a source of revenue, such as Yemen, Gabon and Qatar.

Table 4: Petroleum oils – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3 share of total developing country exports of item)				Most dependent developing country exporters (>= 3 share of country's total exports)			
Country	*Most recent 3 years* [a]	*Average export value (US$m)*	*Share of total DC exports of item (%)* [b]	*Country*	*Most recent 3 years* [a]	*Average export value (US$m)* [b]	*Share of country's total exports (%)* [b]
Saudi Arabia	2005-2007	159,808	34.7	Iraq	2006-2007 [c]	34,070	96.5
Venezuela	2004-2006	45,320	10.5	Nigeria	2002-2003/2006	31,575	93.0
Iran	2004-2006	44,266	10.2	Venezuela	2004-2006	45,320	87.9
UAE	2004-2006	41,038	9.5	Yemen	2005-2007	5024	85.8
Nigeria	2002-2003/2006	31,575	9.4	Gabon	2004-2006	3781	81.8
Mexico	2005-2007	33,658	7.3	Iran.	2004-2006	44,266	79.1
Iraq	2006-2007 [c]	34,070	7.0	Saudi Arabia	2005-2007	159,808	78.0
Algeria	2005-2007	29,567	6.4	Oman	2005-2007	14,003	71.4
Kuwait	2000-2001200/4	12,472	5.1	Brunei	2002-2003/2006	2951	59.6
Qatar	2005-2007	16,002	3.5	Kuwait	2000-2001/2004	12,472	58.9
Oman	2005-2007	14,003	3.0	Algeria	2005-2007	29,567	55.2
				Ecuador	2005-2007	6586	54.3
				Qatar	2005-2007	16,002	47.8
				UAE	2004-2006	41,038	45.7
				Cameroon	2004-2006	1213	42.9
				Syria	2005-2007	3,839	39.8
				Vietnam	2004-2006	7119	21.6
				Papua New Guinea	2002-2004	446	20.3
				Colombia	2005-2007	4704	18.7
				Belize	2005-2007	39	16.0
				Barbados	2005-2007	36	14.3
				Trinidad/Tobago	2005-2007	1755	14.2
				Mexico	2005-2007	33,658	13.7
				Côte d'Ivoire	2005-2007	951	12.2
				Tunisia	2005-2007	1441	11.6
				Indonesia	2005-2007	8514	8.5
				Bolivia	2005-2007	308	7.8
				Egypt	2005-2007	816	6.0
				Malaysia	2005-2007	8903	5.6
				Brazil	2005-2007	6655	4.8
				Guatemala	2005-2007	236	4.6
				Argentina	2005-2007	2070	4.4

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for two years only.
Source: UN Comtrade database (February 2009).

11 Angola has recently overtaken Nigeria as fifth largest oil exporter. However, Angola does not report to Comtrade.

The largest oil exporter, Saudi Arabia, drastically reduced its export volumes in 2006-2007 but still apparently increased its export value; however, as can be seen from Annex 1, countries' reported export volume figures are fragmentary and sometimes incoherent. The Organization of Petroleum Exporting Countries (OPEC – to which most oil exporting countries belong) regulates export volumes according to price and demand. During the period 1993-2003, world production of crude oil increased from 66 to 78 million barrels/day (EIA, 2003). In response to the crisis, OPEC decided in December 2008 to reduce daily production by 4 million barrels; this has not yet significantly affected the price. Further production reductions may be agreed in the next weeks (Der Spiegel, 2009).

3.2.5 Other raw materials: natural rubber (SITC 231)

The prices of natural rubber almost doubled in the period 2005-2008 to $2.73/kg (Figure 11). The price increase was driven by crude oil price peaks and a strong demand for tyres, especially from China. By January 2009, the price had fallen back almost to its 2005 level. The World Bank projects the price of natural rubber to fall to the 2004 level of $1.32/kg by 2020 (World Bank, 2008a).

The largest developing country rubber exporters, Thailand and Indonesia, are also the most dependent, albeit at a relatively low level (about 4% of total export revenue). Rubber also accounts for about 4% of Côte d'Ivoire's total export revenue, but the country exports only about 7% of the volumes exported by the two Asian countries (Table 5 and Figure 12).

The developing country exporters' unit price for rubber developed broadly in line with the world market price (Figure 13), which indicates that they do not enjoy special market preferences but depend completely on the price developments of the global market.

Figure 11: Natural rubber – price developments 2000-Jan. 2009 (US$ cent/kg)

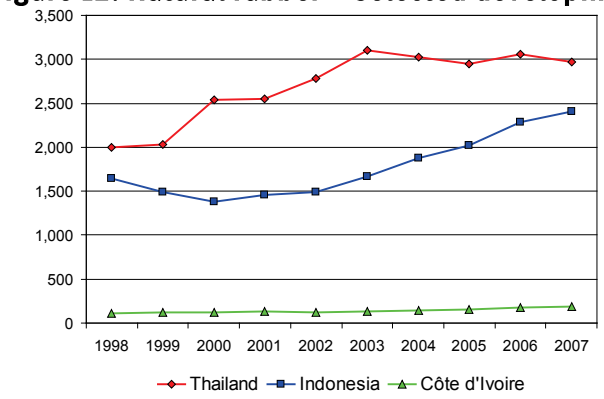
Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Table 5: Natural rubber – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Thailand	2005-2007	4922	40.8	Indonesia	2005-2007	3926	3.9
Indonesia	2005-2007	3926	32.5	Thailand	2005-2007	4922	3.7
Malaysia	2005-2007	1970	16.3	Côte d'Ivoire	2005-2007	292	3.7
Vietnam	2004-2006	777	7.6				

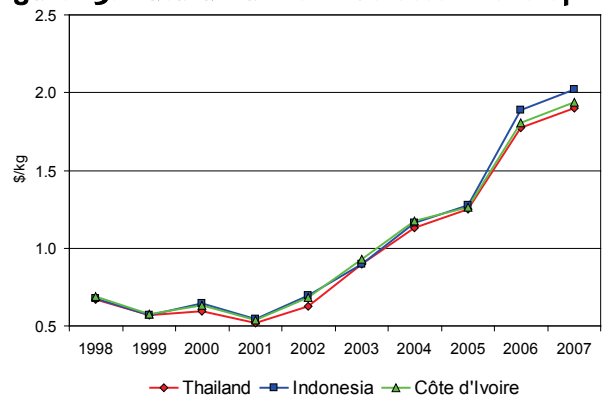
Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

Figure 12: Natural rubber – selected developing country exports, 1998-2007 (kg million)



Source: UN Comtrade database (February 2009).

Figure 13: Natural rubber – selected developing country export unit values (US$/kg)



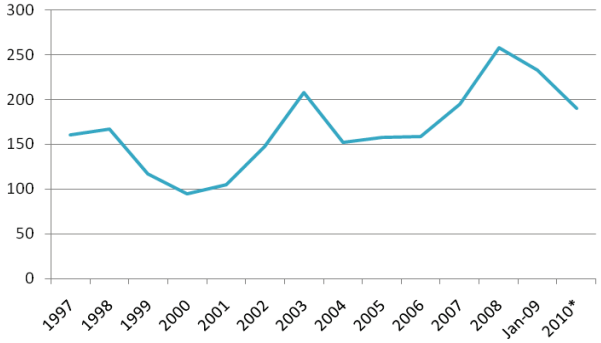
Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.3 Traditional agricultural commodities: Cocoa, coffee, cotton, palm oil, rice, sugar

3.3.1 Cocoa (SITC 072)

Cocoa prices have experienced two recent peaks: one in 2003 at $2.08/kg and one in 2008 at $2.58 (see Figure 14). The 2003 price peak can be explained by political turmoil in the largest supplier country, Côte d'Ivoire, which resulted in decreased global supply. The 2008 price peak was driven by speculations and port disruptions in Côte d'Ivoire. The main producers responded to the high prices by expanded production, which contributed to the current price decline. Production is forecast by the World Bank to expand more rapidly than demand and prices are expected to be at the 2005 price level by 2020 (World Bank, 2008a).

Figure 14: Cocoa – price developments 1997-Jan. 2009 (US$ cent/kg)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

As with rubber, the biggest exporters, Côte d'Ivoire and Ghana, are (together with the small exporter São Tomé) also the most dependent (Table 6). For Indonesia and Malaysia, which are also large cocoa exporters, cocoa accounts only for a marginal share of total export revenues.

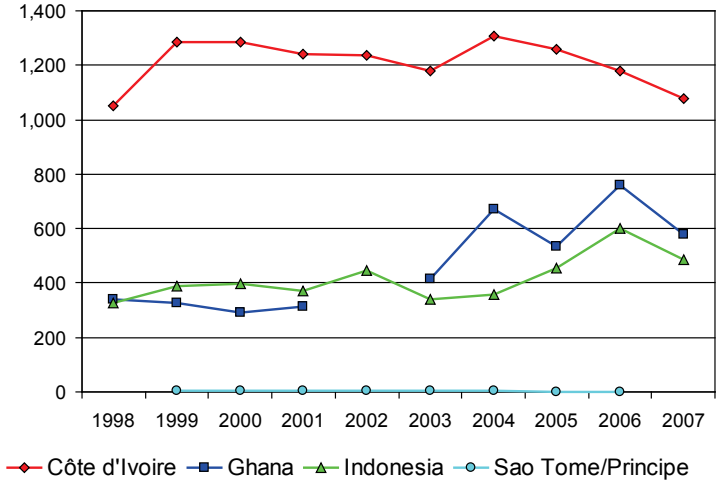
As can be seen from Figure 15, Ghana and Indonesia took advantage of increasing cocoa prices and expanded their export volumes slightly. Declining volumes in 2007 (when prices peaked) can be explained by poor harvest and weather conditions in both countries. In Côte d'Ivoire, political instability contributed to the fact that the country was not able to take advantage of the rising prices.

Table 6: Cocoa – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Côte d'Ivoire	2005-2007	2022	38.3	São Tomé	2004-2006	3	88.7
Ghana	2005-2007	1060	20.1	Ghana	2005-2007	1060	29.3
Indonesia	2005-2007	798	15.1	Côte d'Ivoire	2005-2007	2022	25.9
Malaysia	2005-2007	542	10.3	Cameroon	2004-2006	257	9.1
Cameroon	2004-2006	257	5.0	Vanuatu	2000/2006-2007	2	6.4
Brazil	2005-2007	232	4.4	Dominican Republic	2001[c]	41	5.1
Ecuador	2005-2007	184	3.5	Togo	2004-2005/2007	17	4.9
				Solomon Islands	2005-2007	5	4.3
				Grenada	2004-2006	1	3.7
				Sierra Leone	2002[c]	1	3.2

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only.
Source: UN Comtrade database (February 2009).

Figure 15: Cocoa – selected developing country exports, 1998-2007 (kg million)



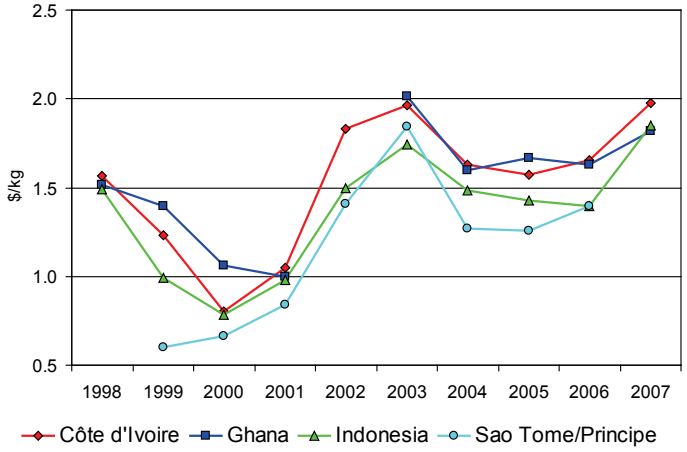
Source: UN Comtrade database (February 2009).

Looking at the countries' unit values, we see a higher figure for Côte d'Ivoire and Ghana than for Indonesia (Figure 16). One possible explanation could be African countries' preferential market access to the EU, their main market and one in which they do not pay any tariffs. Indonesia, on the other hand, faces export tariffs of 2.8% for cocoa powder, 4.2% for cocoa butter, fat or oil and 6.1% for cocoa paste when exporting to the EU (although cocoa beans enter duty free). However, since São Tomé's unit values are lower than those of Indonesia, differing product quality is a more likely explanation.

The International Cocoa Organization (ICCO) has revised its forecast for 2009 world cocoa production downwards slightly, which might negatively affect the major exporters Côte d'Ivoire, Ghana and Indonesia. However, recent figures suggest that the downswing in coffee prices may already have bottomed out, with the lowest price ($2072/tonne) being recorded in November 2008, while the

February 2009 price of $2647/tonne was almost at the pre-crisis level.[12] This confirms that cocoa has a low price elasticity of demand. As ICCO research has shown, a 10% price increase/decrease reduces/boosts consumption by less than 1% (ICCO, 2000).

Figure 16: Cocoa – selected developing country export unit values, 1998-2007 (US$/kg)

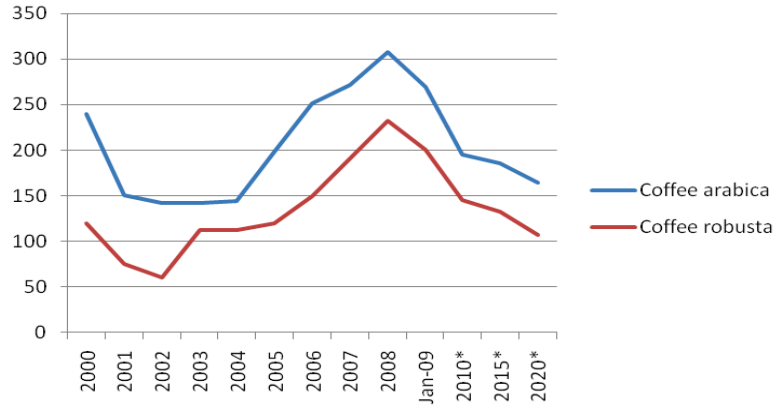


Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.3.2 Coffee (SITC 071)

Coffee prices increased by more than 50% (Arabica) and almost 100% (Robusta) in the period 2005-2008 (Figure 17). The price increase reflects a decrease in global production owing to poor weather conditions for the main producers, Brazil and Vietnam, during the harvest 2006/07. However, global crop production has recovered in the meanwhile and is expected to increase by about 2.5% in the period 2009/10. As a result of this increased production output, the World Bank expects prices to fall to about the 2005 level by 2020 (World Bank, 2008a).

Figure 17: Coffee – price developments 2000-Jan. 2009 (US cent/kg)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Brazil, Colombia and Vietnam account together for about 57% of developing country coffee exports. The countries that are highly dependent on coffee exports are largely (very) small exporters, mainly from Africa (see Table 7).

As can be seen from Figure 18, only Vietnam (which has become the world's third largest coffee exporter in just 10 years) significantly expanded its volumes as a response to the high prices. However, owing to the recent price declines, the country has already reduced its exports and forecasts an export decline of 13% for 2009 (Xinhua, 2008).

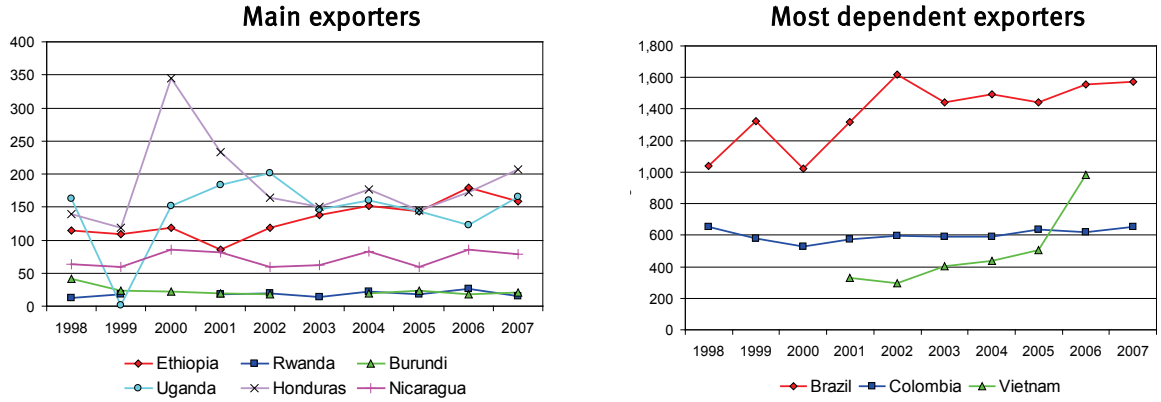
12 See ICCO monthly averages of daily prices at: http://www.icco.org/statistics/monthly.aspx?AD=2008&MD=6&AH=2009&MH=3&Tipo=Tabla&Datos=USD.

Table 7: Coffee – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Brazil	2005-2007	3395	31.5	East Timor	2004-2005[c]	7	96.4
Colombia	2005-2007	1718	16.0	*Sierra Leone*	*2002*	*36*	*86.5*[d]
Vietnam	2004-2006	876	9.4	Ethiopia	2005-2007	393	36.7
Indonesia	2005-2007	612	5.7	Rwanda	2005-2007	39	30.4
Guatemala	2005-2007	509	4.7	Burundi	2005-2007	41	30.1
Peru	2005-2007	416	3.9	Uganda	2005-2007	209	22.8
Honduras	2005-2007	407	3.8	Honduras	2005-2007	407	22.1
India	2005-2007	406	3.8	Nicaragua	2005-2007	182	19.4
Ethiopia	2005-2007	393	3.7	El Salvador	2005-2007	180	10.2
Mexico	2005-2007	382	3.5	Guatemala	2005-2007	509	9.9
				Colombia	2005-2007	1718	6.8
				Tanzania	2005-2007	93	5.3
				Kenya	2005-2007	144	3.9
				Papua New Guinea	2002-2004	76	3.5
				Costa Rica	2005-2007	251	3.2

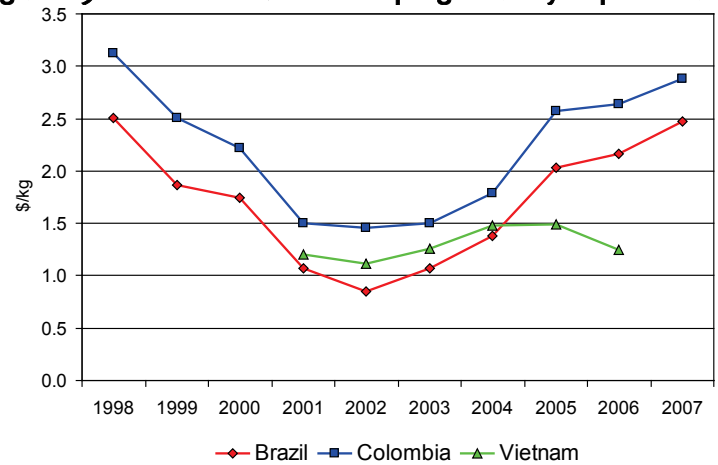
Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only. d) According to figures reported by Sierra Leone for 2002 (the only year for which data are available).
Source: UN Comtrade database (February 2009).

Figure 18: Coffee – main and most dependent developing country exports (kg million)



Source: UN Comtrade database (February 2009).

Figure 19: Coffee – main developing country exporter unit values, 1998-2007 (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

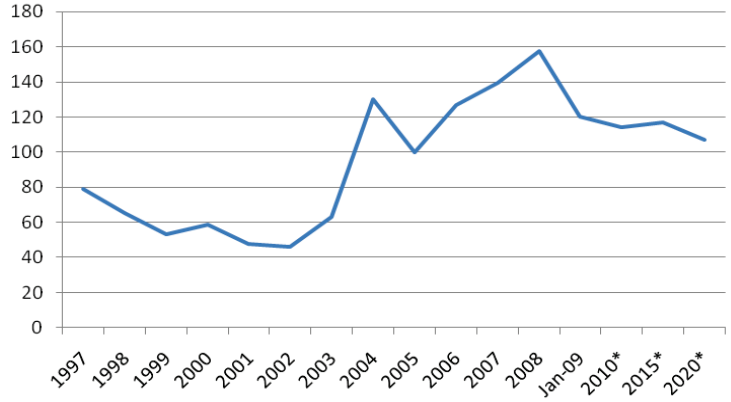
Unlike Brazil and Colombia, Vietnam's unit value for coffee has declined (Figure 19), which demonstrates that Vietnam's profit margin for coffee is lower than those of its competitors. A lower global price combined with decreased demand is therefore likely to have severe consequences for Vietnamese coffee producers. The International Coffee Organisation (ICO) does not expect global demand for coffee to be affected by the global financial crisis. The income elasticity for coffee is low and in the past rising/declining retail prices have had little effect on consumption. Generally, we see a widening gap between producer and consumer prices, with coffee-producing countries receiving lower profits despite rising retail prices (ICO, 2009). Arguably, the crisis might therefore worsen the position of producers in the global value chain, thus further reducing their profit margin. This is particularly likely to affect conventional producers that do not serve valued-added markets (such as fair trade or organic products).

3.3.3 Cotton (SITC 263)

Cotton prices have been more volatile than most other commodities in the past decade and also increased less markedly in the period 2005-2008. The price increase (from about $0.80/kg in 1997 to $1.39 in 2007) can be explained by a 40% reduction in US plantings, and thus exports. The US is the world's second largest cotton producer (after China) and exports around half of its heavily subsidised production.

Global cotton production is expected to decrease owing to a decline in cotton producing areas (World Bank, 2008a). However, the reduced production will meet a stagnant supply so that the World Bank expects prices to decline slightly further (see Figure 20).

Figure 20: Cotton – price developments 1997-Jan. 2009 (US cent/kg)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

India and Brazil are the major developing country cotton exporters, accounting together for more than 50% of exports. West African cotton producers supply only about 20% of developing country cotton exports but the commodity is of far greater importance for them, accounting as it does for almost 70% of the total export revenue of Burkina Faso and Benin (Table 8).

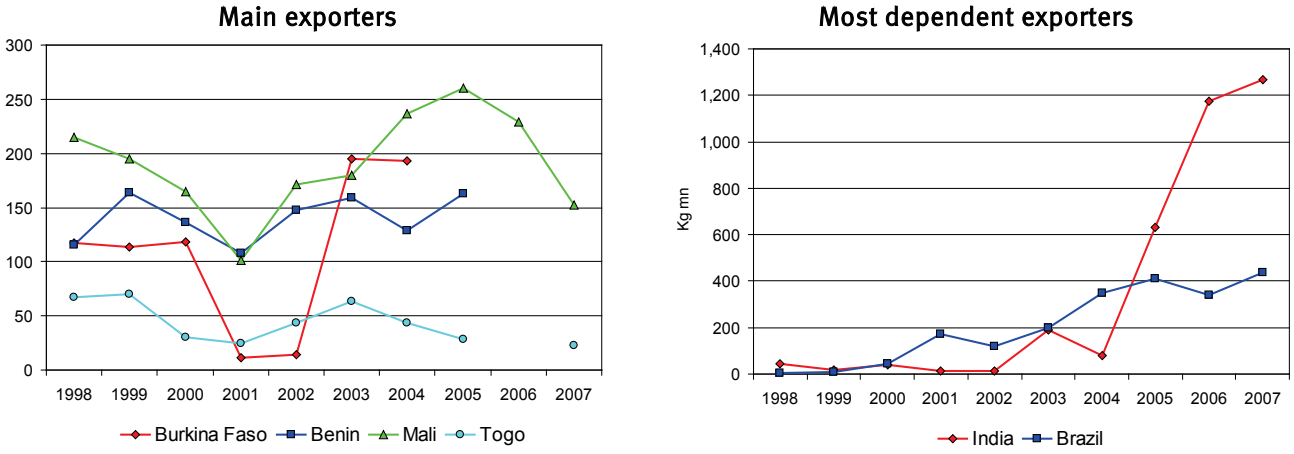
India increased its cotton exports more than tenfold in the period 2004-2007, taking full advantage of the rising price. Brazil also increased its exports considerably, albeit on a smaller scale. These two countries have become the biggest developing country cotton exporters in one decade, each having exported virtually no cotton in 1998. Traditional West African cotton exporters, on the other hand, were hardly able to expand their export quantities; for Togo and Mali export volumes have even decreased (Figure 21).

Table 8: Cotton – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
India	2005-2007	1226	37.3	Burkina Faso	2002-2004	202	68.7
Brazil	2005-2007	441	13.4	Benin	2003-2005	183	68.6
Burkina Faso	2002-2004	202	7.4	Mali	2005-2007	238	17.7
Mali	2005-2007	238	7.3	Togo	2004-2005/2007	38	11.1
Benin	2003-2005	183	5.9	Tanzania	2005-2007	79	4.6
Syria	2005-2007	171	5.2	Cameroon	2004-2006	127	4.5
Egypt	2005-2007	155	4.7	Uganda	2005-2007	29	3.1
Cameroon	2004-2006	127	3.8				
Côte d'Ivoire	2005-2007	118	3.6				
Pakistan	2005-2007	117	3.6				

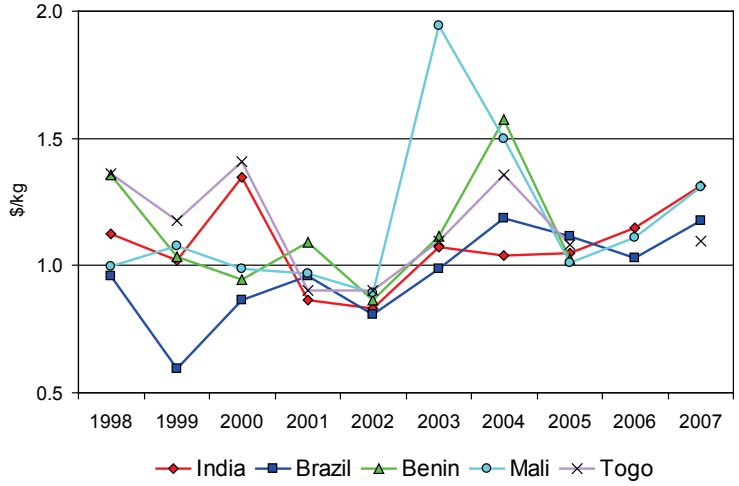
Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

Figure 21: Cotton – main and most dependent developing country exports, 1998-2007 (kg m.)



Source: UN Comtrade database (February 2009).

Figure 22: Cotton – selected developing country export unit values, 1998-2007 (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

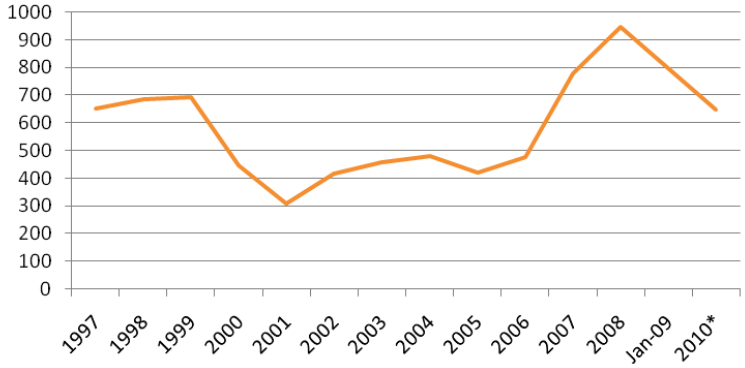
The unit values of both the main and the most dependent exporters remained largely static during the past decade, ranging from an annual average 3% increase (Mali) to a 4% decrease (Benin) in the period 1998-2007 (Figure 22). Owing to the increasing growing of genetically modified (GM) cotton by India

and Brazil (and the US), these countries are expected to achieve higher unit prices than West African countries, which have to rely on conventional production and are therefore more dependent on external conditions. The increased use of GM technology is expected to increase the outputs of the largest cotton exporters further, which will contribute to the downward pressure on cotton prices (World Bank, 2008a).

3.3.4 Palm oil (SITC 422)[13]

Palm oil prices increased by more than 120% in the period 2005-2008 to a historic peak of $1175/tonne in the first half of 2008 but fell shortly thereafter (Figure 23). Although the price outlook points to downward pressure as a result of weakening demand for palm oil (and competing oils for biofuels), prices are expected to stay at a historically comparable high level. According to World Bank forecasts, the palm oil price will be about $700/tonne in 2020 (World Bank, 2008a).

Figure 23: Palm oil – price developments 1997-Jan. 2009 (US$/ton)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Indonesia is both the largest developing country exporter and one of those for which palm oil accounts for a significant share of export revenue (about 7%). Together, Indonesia and Malaysia account for almost 90% of developing country palm oil exports. As can be seen from Table 9, however, dependency on palm oil for export revenue is limited – the largest share being 8.4% for Vanuatu.

Table 9: Palm oil – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Indonesia	2005-2007	6636	44.1	Vanuatu	2000 & 2006-2007	3	8.4
Malaysia	2005-2007	6399	42.6	Indonesia	2005-2007	6636	6.6
Philippines	2005-2007	657	4.4	Papua New Guinea	2002-2004	131	5.9
				Kiribati	1998-1999 & 2005	0.3	5.3
				Solomon Islands	2005-2007	6	4.8
				Honduras	2005-2007	76	4.1
				Malaysia	2005-2007	6399	4.0

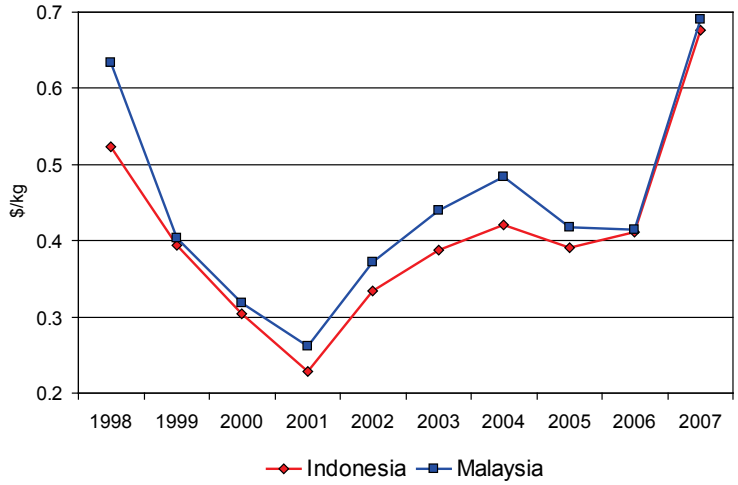
Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

Indonesia is not only the largest palm oil exporter but also the one with the highest volume growth rates. In the period 1998-2007 its palm oil exports grew by 23% p.a., overtaking those of Malaysia in 2005 (see Annex 1).

13 Palm oil and fixed vegetable oils.

Indonesia's and Malaysia's unit values developed in parity with world market prices, thus increasing dramatically since 2006 (Figure 24).[14]

Figure 24: Palm oil – selected developing country export unit values (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.3.5 Rice (SITC 042)

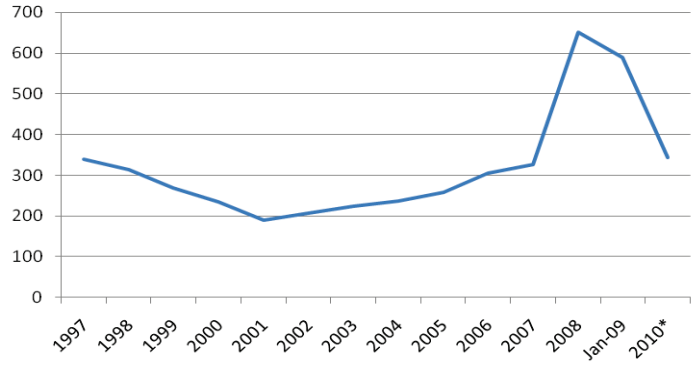
The average 2008 price for rice was, at $650/tonne, more than two and a half times as high as the 2005 price. As outlined by Wiggins (2008) and Gilbert (2008), this extraordinary price increase can be explained by a number of factors. The strong demand caused by high wheat prices[15] resulted in restocking of rice by a number of countries. Furthermore, major rice producers (India, Egypt, Cambodia, Vietnam and Indonesia) introduced 'precautionary' protectionist trade policy measures such as export bans or export restrictions. The supply response occurred with a time lag that met a stagnant demand – resulting in first price falls which the World Bank projects to reach their lowest point in 2010. However, the projected bottom price of about $340/tonne would be still about 11% higher than the 2006 level (see Figure 25). According to the World Bank (2008a), countries' protectionist trade policy measures have shaken global confidence in the sustainability of the rice market, which is likely to contribute to larger national stocks in the future, thus increasing the price volatility even further.

Thailand, India, Vietnam and Pakistan account for about 90% of developing country rice exports. Their dependency on rice for export revenue is, however, low: only for Pakistan and Vietnam does rice account for a significant share of total exports (see Table 10). The Caribbean islands Guyana and St Vincent are the most dependent developing country exporters, with rice accounting for about 10% of total export revenue.

St Vincent has a much higher unit value than all other rice exporters. In 2006 it was almost twice as high as the world market price (see Figure 26). Like Guyana, St Vincent benefits from preferential access in the EU market. However, Guyana's average unit value is the lowest among all developing country rice exporters, which suggests that the EU's DFQF market access for Caribbean countries is not the explanatory variable. One possible explanation is that St Vincent (which is a tiny rice exporter, exporting less than 3.5% of Guyana's total rice exports in 2006) exports only within the Caribbean community market where, as a less developed country, it benefits from intra-regional protection (as outlined in Art. 164 of the Revised Treaty of Chaguaramas).

14 The most dependent palm oil exporter, Vanuatu, reported only irregularly to Comtrade in the period 1998-2007 so no time series of unit values could be calculated (see Annex 1).
15 Owing to harvest failures in major producing countries and farmers' diversion from wheat to maize production to benefit from high biofuels prices.

Figure 25: Milled rice (Thai, 5%): price developments 1997-Jan. 2009 (US$/ton)



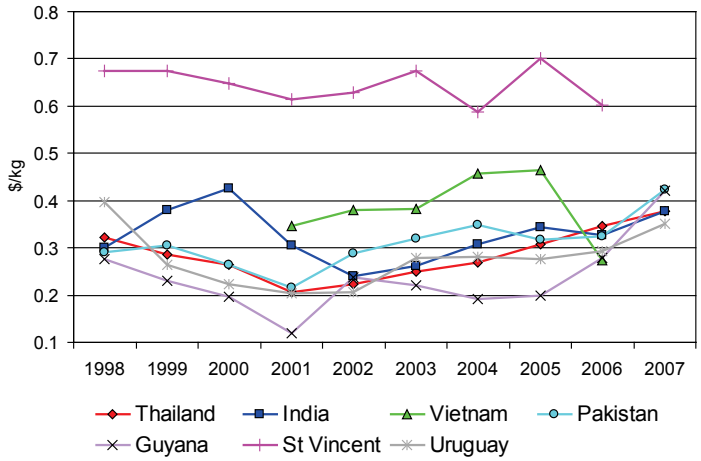
Sources: IFS data (up to 2005) and World Bank data (including forecasts).

Table 10: Rice – main developing country exporters and most dependent exporters

Main developing country exporters (›= 3% share of total developing country exports of item)				Most dependent developing country exporters (›= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Thailand	2005-2007	2790	35.3	Guyana	2005-2007	57	9.3
India	2005-2007	1772	22.4	St Vincent	2004-2006	3	9.2
Vietnam	2004-2006	1212	16.7	Pakistan	2005-2007	1132	6.8
Pakistan	2005-2007	1132	14.3	Uruguay	2005-2007	233	5.9
China	2005-2007	371	4.7	Vietnam	2004-2006	1212	3.7
Egypt	2005-2007	338	4.3	Suriname	1999-2001	12	3.1

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c
Source: UN Comtrade database (February 2009).

Figure 26: Rice – selected developing country export unit values, 1998-2007 (US$/kg)

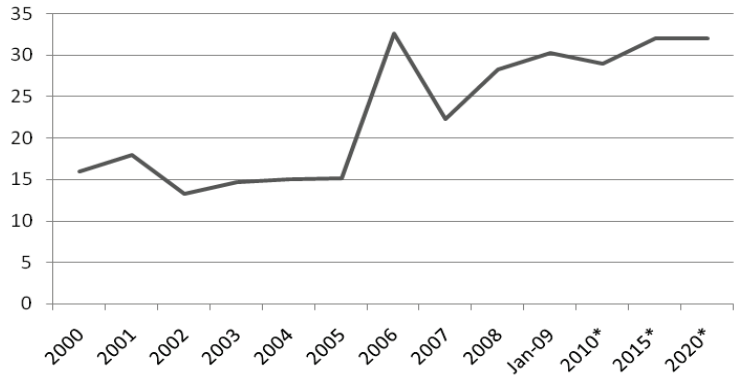


Source: UN Comtrade database (February 2009).

3.3.6 Sugar (SITC 061)

The free market sugar price has been greatly affected by global subsidies and protectionist measures. Still, the free market sugar price showed an 88% increase in the period 2005-2008, reaching $0.28/kg in 2008 (see Figure 27). This reflects declining production in the EU as well as the rising oil prices which encouraged Brazil (the world's largest sugar producer) to shift some production from cane sugar to ethanol. With the falling oil price it is expected that the demand for ethanol will decrease, which might result in increased sugar production by Brazil, thus depressing the sugar price. However, the World Bank (2008a) expects the stabilisation of sugar prices at the current level in the medium term, though future policy processes (such as the reform of the EU Common Sugar Market) might distort these forecasts.

Figure 27: Free market raw sugar – price developments 2000-Jan. 2009 (US$ cent/kg)



Sources: IFS data (up to 2005) and World Bank data (including forecasts).

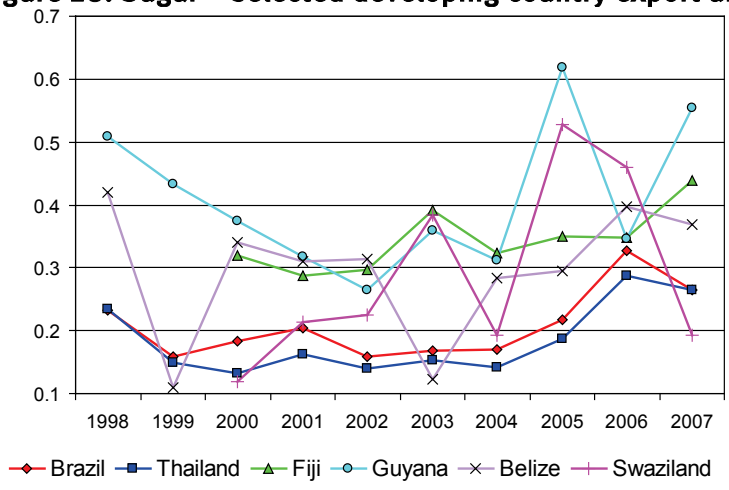
Brazil accounts for more than 45% of developing country sugar exports. The most dependent sugar exporters are all ACP countries that benefited from the EU's Sugar Protocol which guaranteed fixed prices for an allocated sugar quota. For Fiji, Guyana, Belize, Mauritius and Swaziland sugar accounts for about 20% on average of total export revenue (see Table 11).

Table 11: Sugar – main developing country exporters and most dependent exporters

Main developing country exporters (›= 3% share of total developing country exports of item)				**Most dependent developing country exporters (›= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Brazil	2005-2007	5098	45.5	Fiji	2005-2007	125	25.4
Thailand	2005-2007	977	8.7	Guyana	2005-2007	150	24.4
India	2005-2007	658	5.9	Belize	2005-2007	45	18.6
				Mauritius	2005-2007	335	17.8
				Swaziland	2005-2007	220	16.0
				Dominican Republic	2001[c]	67	8.3
				Barbados	2005-2007	20	8.0
				Malawi	2005-2007	51	7.5
				Nicaragua	2005-2007	70	7.5
				Guatemala	2005-2007	332	6.4
				Cuba	2004-2006	152	6.0
				El Salvador	2005-2007	86	4.9
				Jamaica	2005-2007	89	4.8
				Brazil	2005-2007	5098	3.7

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only.
Source: UN Comtrade database (February 2009).

Figure 28: Sugar – selected developing country export unit values, 1998-2007 (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.4 Non-traditional agricultural exports: Vegetables, fruit, flowers

3.4.1 Vegetables and vegetable products (SITC 054)

Non-traditional agricultural exports such as fresh and frozen vegetables and fruit and flowers generally show a lower price volatility than traditional agricultural exports (UNCTAD, 2002). Mexico and China are the largest developing country fresh, chilled and frozen vegetable producers, accounting together for about 56% of total developing country exports (see Table 12). However, for none of them do vegetable exports account for a significant export share. ACP countries, on the other hand, depend significantly on vegetables as an export revenue earner.

Although the ACP producers export their vegetables largely to the EU market (their traditional export destination), they do not benefit from higher unit prices than the big exporters (see Figure 29). Gambia experienced a huge unit price decline in the period 1998-2003. This can be explained either by declining product quality or by increased competition in the export market, where countries with less static export volumes than Gambia managed to benefit from economies of scale.

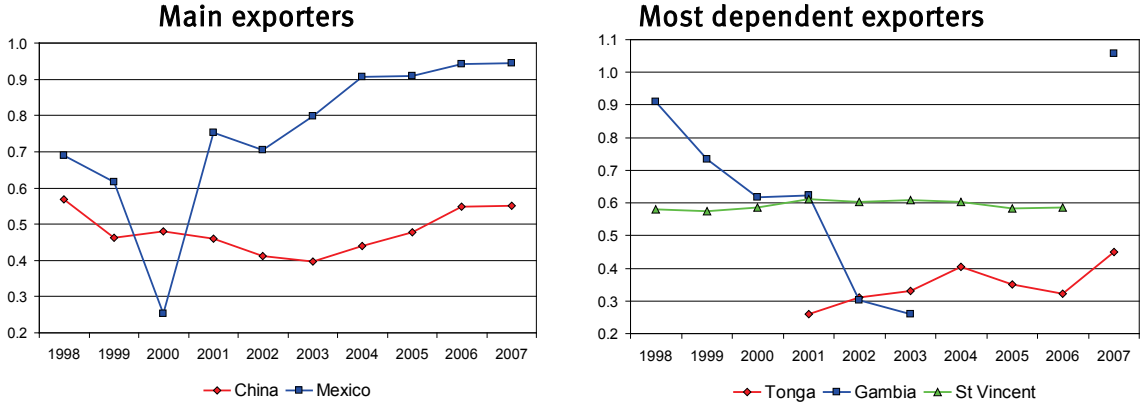
As can be seen from Figure 29, Mexico benefited from a much higher unit value than China. Despite increasing its volumes at a much faster rate than Mexico in the past decade (see Figure 30), China's total export revenue from vegetables was 5% below that earned by Mexico (see Annex 1).

Table 12: Vegetables – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				**Most dependent developing country exporters (>= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Mexico	2005-2007	3381	29.5	Tonga	2005-2007	4	46.6
China	2005-2007	3012	26.3	Vanuatu	2000/2006-2007	5	16.0
Thailand	2005-2007	657	5.7	Gambia	2005-2007	1	11.9
India	2005-2007	556	4.8	St Vincent	2004-2006	4	10.5
Morocco	2005-2007	390	3.4	Jordan	2005-2007	268	6.6
Syria	2005-2007	345	3.0	Ethiopia	2005-2007	67	6.3
				Kenya	2005-2007	220	6.0
				Niger	2005-2007	22	5.8
				Zimbabwe	2005-2007	200	5.5
				Eritrea	2001-2003	1	5.2
				Dominica	2005-2007	2	4.4
				Fiji	2005-2007	19	3.8
				Nicaragua	2005-2007	35	3.8
				Syria	2005-2007	345	3.6
				Dominican Republic	2001[c]	28	3.4
				Morocco	2005-7	390	3.1%

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only.
Source: UN Comtrade database (February 2009).

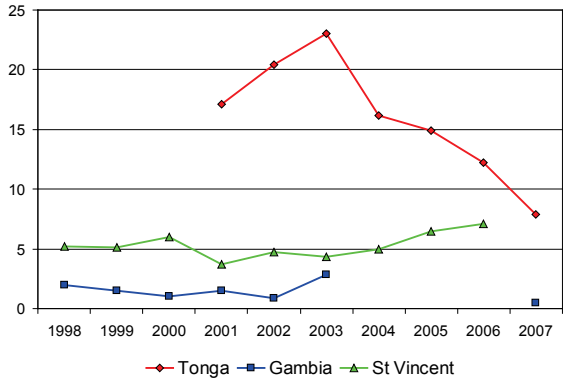
Figure 29: Vegetables – selected developing country export unit values, 1998-2007 (US$/kg)



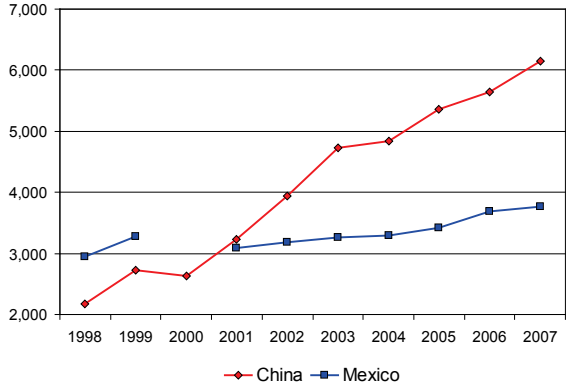
Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

Figure 30: Vegetables – main and most dependent developing country exports, 1998-2007 (kg m.)

Main exporters



Most dependent exporters



Source: UN Comtrade database (February 2009).

3.4.2 Fruit and nuts (SITC 057)

As is the case with vegetables, ACP countries supply only very small quantities but are the most heavily dependent exporters. Chile, Mexico, South Africa, Iran and Ecuador are the largest developing country exporters, together accounting for more than 40% of total developing country exports. The volumes exported by the five most dependent exporters (St Lucia, St Vincent, Panama, Dominica and Belize) account together for just 18% of Chile's total exports (see Table 13).

Table 23: Fruit and nuts – main developing country exporters and most dependent exporters

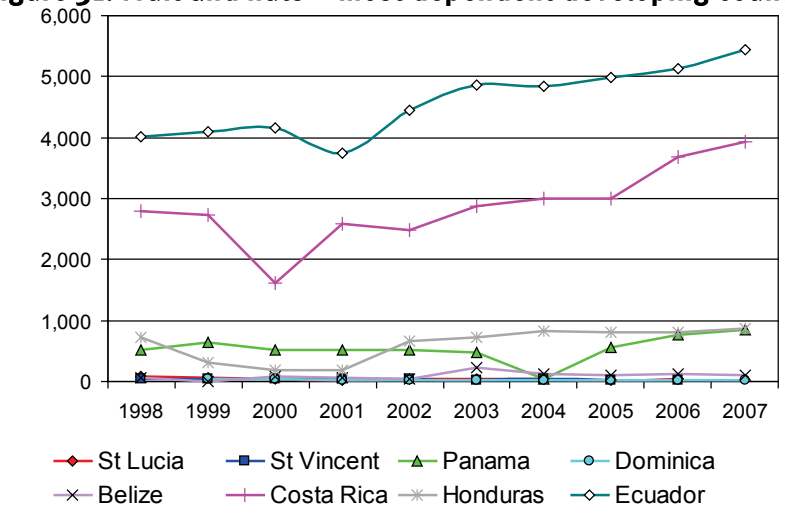
Main developing country exporters (>= 3% share of total developing country exports of item)				**Most dependent developing country exporters (>= 3% share of country's total exports)**			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Chile	2005-2007	2115	12.2	St Lucia	2004-2006	18	39.7
Mexico	2005-2007	1621	9.3	St Vincent	2004-2006	13	38.2
South Africa	2005-2007	1288	7.4	Panama	2005-2007	303	29.2
Iran	2004-2006	1185	7.4	Dominica	2005-2007	10	26.4
Ecuador	2005-2007	1260	7.3	Belize	2005-2007	38	15.9
China	2005-2007	1127	6.5	Costa Rica	2005-2007	1126	14.5
Costa Rica	2005-2007	1126	6.5	Honduras	2005-2007	199	10.8
Argentina	2005-2007	878	5.1	Ecuador	2005-2007	1260	10.4
India	2005-2007	859	5.0	Dominican Rep.	2001[c]	61	7.5
Brazil	2005-2007	754	4.3	Guatemala	2005-2007	377	7.3
Philippines	2005-2007	626	3.6	Benin	2003-2005	18	6.9
Vietnam	2004-2006	568	3.6	Gambia	2005-2007	1	6.6
Colombia	2005-2007	575	3.3	Bhutan	1998-1999[d]	5	4.1
				Chile	2005-2007	2115	4.0
				Côte d'Ivoire	2005-2007	278	3.6
				Morocco	2005-2007	391	3.1

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only. d) Data available for two years only.
Source: UN Comtrade database (February 2009).

Not only are the ACP tiny fruit and nut exporters but also their export volumes have remained static. The largest exporters (Mexico and Chile) and the Latin American most dependent exporters (Costa Rica and Ecuador), on the other hand, increased their exports by an annual 3-5% (see Figure 31 and Annex 1).

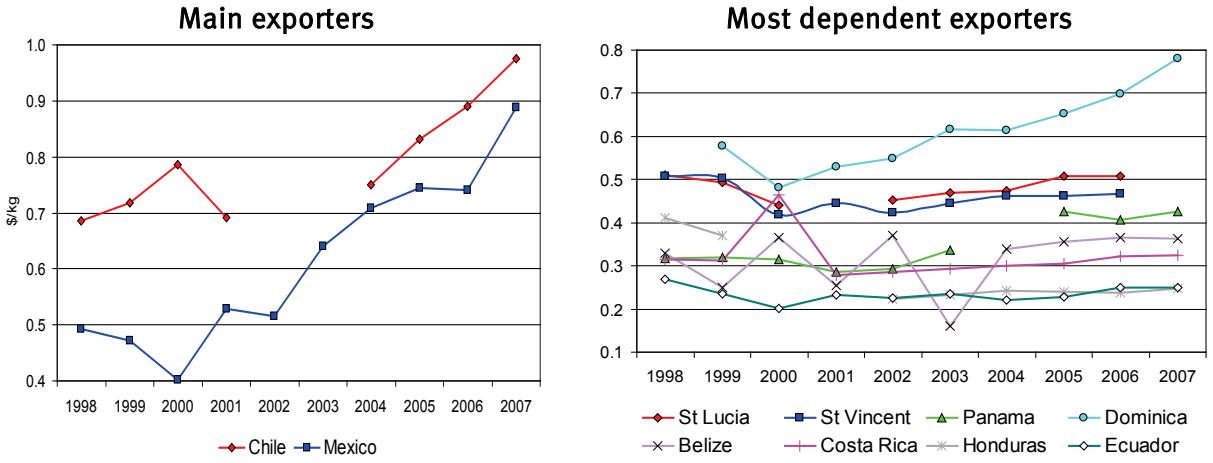
The largest exporters benefited further from increasing unit prices: up by 4% p.a. for Chile and 7% for Mexico in the period 1998-2007. Of the most dependent exporters, only Dominica achieved a similar level, with a 4% p.a. increase (see Figure 32 and Annex 1).

Figure 31: Fruit and nuts – most dependent developing country exports, 1998-2007 (kg million)



Source: UN Comtrade database (February 2009).

Figure 32: Fruit and nuts – main and most dependent developing country export unit values, 1998-2007 (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.4.3 Flowers (SITC 292)[16]

Cut flowers are an important export product for Ethiopia, Kenya and Zimbabwe, accounting for between 9% and 14% of their total export revenue (see Table 14). Kenya and Zimbabwe are also among the main developing country exporters, with a share of about 6% each. The largest developing country flower exporter, Colombia, is also one of the most dependent, with flowers accounting for 4% of its export revenue.

16 SITC 292 = crude vegetable materials (including flowers).

Table 3: Flowers – main developing country exporters and most dependent exporters

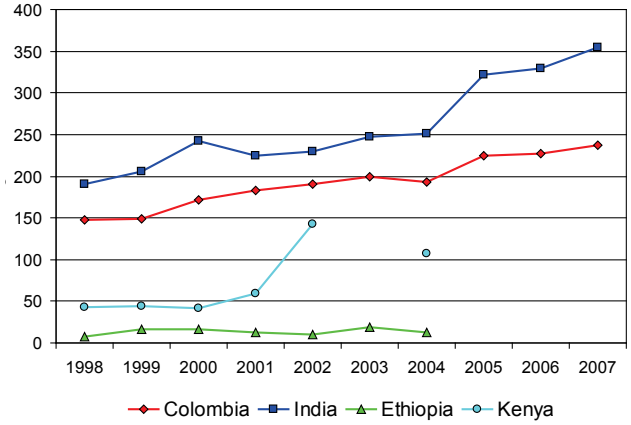
Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
Colombia	2005-2007	1009	17.3	Ethiopia	2005-2007	146	13.6
China	2005-2007	841	14.4	Kenya	2005-2007	380	10.4
India	2005-2007	653	11.2	Zimbabwe	2005-2007	336	9.2
Ecuador	2005-2007	408	7.0	Kiribati	1998-1999/2005	0.4	6.9
Kenya	2005-2007	380	6.5	Eritrea	2001-2003	1	6.0
Zimbabwe	2005-2007	336	5.7	Tonga	2005-2007	0.5	5.1
Chile	2005-2007	265	4.5	Colombia	2005-2007	1009	4.0
Mexico	2005-2007	209	3.6	Uganda	2005-2007	36	3.9
Costa Rica	2005-2007	185	3.2	Ecuador	2005-2007	408	3.4

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned. c) Data available for one year only. d) Data available for two years only.
Source: UN Comtrade database (February 2009).

Both the main exporters and the most dependent exporter were able to expand their export volumes between 5% p.a. (Colombia) and 16% p.a. (Kenya) in the reported time periods (see Figure 33).

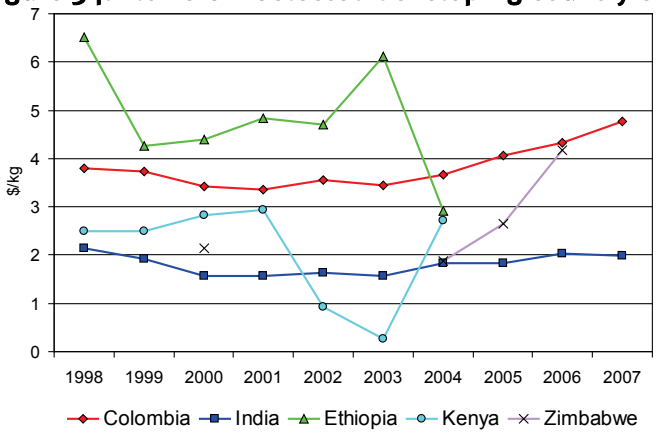
The unit prices obtained differ greatly from country to country and show, particularly among the African suppliers, large fluctuations, which might be explained by weather conditions. Colombia and India show much more stable unit prices, the former with a positive trend. On average, Colombia obtained a unit price almost 2.5 times as high as India's (see Figure 34).

Figure 33: Flowers – selected developing country exports, 1998-2007 (kg million)



Note: An anomalous 'outlier' (931 kg million for Kenya in 2003) omitted.
Source: UN Comtrade database (February 2009).

Figure 34: Flowers – selected developing country export unit values, 1998-2007 (US$/kg)



Source: Calculated from value/quantity data from UN Comtrade database (downloaded February 2009).

3.5 Labour-intensive manufactured products

The 'Fallacy of Composition' problem, according to which primary products face not only the problem of fluctuating and deteriorating terms of trade but also an unfavourable international constellation of supply and demand, has been expanded to cover simple manufactured products. Since developing countries with large supply capacities, such as China, India or Brazil, are able to produce labour-intensive high-quality products at lower costs than small developing countries, the international competition for simple manufactured products is high. This can exert a downward influence on prices and the terms of trade for basic manufactured goods. If again exporters face significant and sustained declining terms of trade, their export activities may even result in 'immiserizing growth' (Bhagwati, 1958), which means that increased export quantities do not fully compensate for terms of trade losses but contribute to a further deterioration of terms of trade, thus increasing developing countries' dependency on exactly these export activities. It is argued that the export of simple labour-intensive manufactured goods can be compared with that of primary commodities rather than technology-intensive manufactures.

3.5.1 Computer equipment (SITC 752)[17]

The global manufacturing of computer equipment is largely carried out in China, Malaysia and Thailand, with China accounting for the largest share of developing country exports (68%). The three countries are also (together with the Philippines) comparatively dependent on the export of computer equipment, which accounts for between 8% and 10% of their total export revenue (see Table 15).

Table 45: Computer equipment – main developing country exporters and most dependent exporters

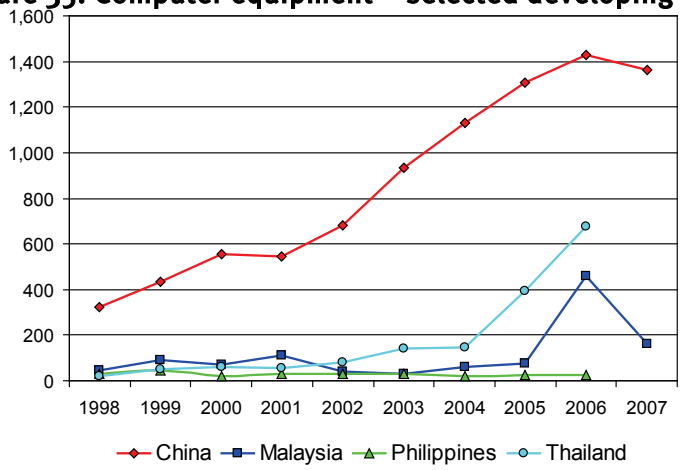
Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
China	2005-2007	93,853	68.3	Malaysia	2005-2007	15,504	9.7
Malaysia	2005-2007	15,504	11.3	China	2005-2007	93,853	9.5
Thailand	2005-2007	10,589	7.7	Philippines	2005-2007	4229	9.1
Mexico	2005-2007	9233	6.7	Thailand	2005-2007	10,589	8.1
Philippines	2005-2007	4229	3.1	Hong Kong, China	2005-2007	1290	6.4
				Tuvalu	2003-2005	0.004	4.5
				Mexico	2005-2007	9233	3.8

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

China's exports more than doubled in the period 2002-2007. Both China and Malaysia reported a decline in export volumes from 2006 to 2007 – though from a very high level compared to previous exports (see Figure 35).

17 SITC 752 = automatic data processing machines and units thereof; magnetic or optical readers; machines transcribing coded media and processing such data, n.e.s.

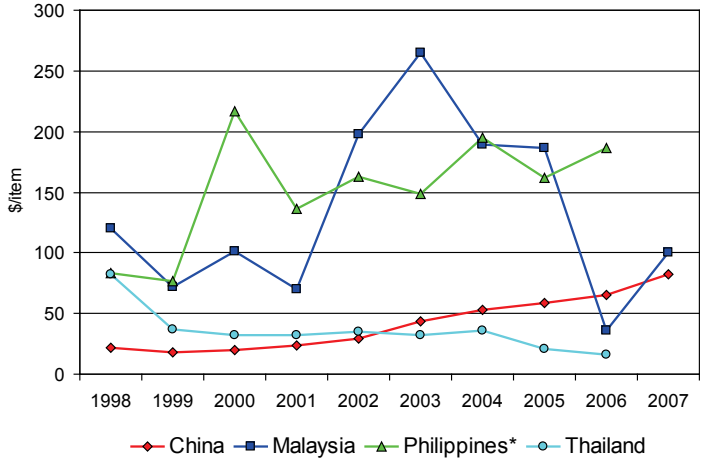
Figure 35: Computer equipment – selected developing country , 1998-2007 exports (kg million)



Source: UN Comtrade database (February 2009).

There are huge discrepancies in the countries' unit values, which can be explained by the variety of items that are covered by the grouping 'computer equipment'. It appears from Figure 36 that China and Thailand serve the lower-value market segment, although China managed to increase its average unit value per item significantly, from $21.95 in 1998 to $82.22 in 2007. Surprisingly, the average unit value of one of the most dependent exporters, Philippines, is the highest. One possible explanation is special trade and investment relations between the US and the Philippines, which favour US investment and sourcing and allow largely free exports from the Philippines into the US market.

Figure 36: Computer equipment – selected developing country export unit values, 1998-2007 (US$/item)



Note: * US$/kg in 1998-1999 and 2007 and US$/item in all other years.
Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

3.5.2 Female clothing, woven (SITC 842)

Woven female clothing is another product that is largely supplied by Southeast Asian countries, with China and India leading, together accounting for more than 66% of total developing country exports. The most dependent countries, Sri Lanka, Bangladesh and Nepal, are neighbours to the main exporters. As can be seen from Table 16, a broad range of developing countries depend on the production of woven female clothing for export revenue.[18]

18 In the case of African countries, this can be explained by unilateral preference in the US market under the African Growth and Opportunity Act (AGOA) which, since 2000, has allowed African countries to export single transformed clothes DFQF to the US market. This has resulted in Chinese investment in Africa and a massive increase in African apparel and clothing exports to the US.

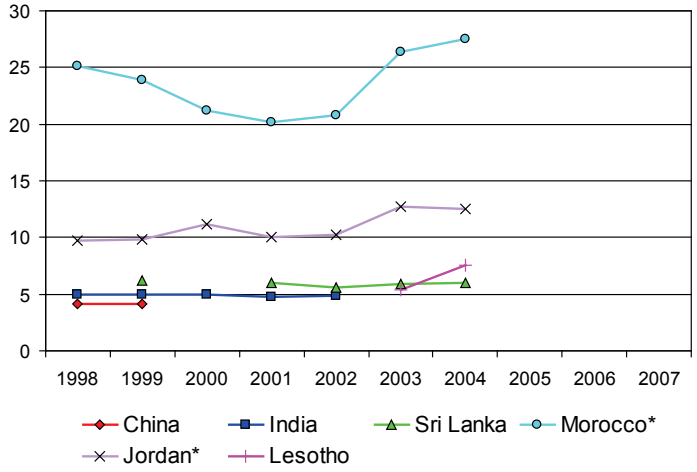
Table 56: Woven female clothing – main developing country exporters and most dependent exporters

Main developing country exporters (>= 3% share of total developing country exports of item)				Most dependent developing country exporters (>= 3% share of country's total exports)			
Country	*Most recent 3 years*[a]	*Average export value (US$m)*	*Share of total DC exports of item (%)*[b]	*Country*	*Most recent 3 years*[a]	*Average export value (US$m)*[b]	*Share of country's total exports (%)*[b]
China	2005-2007	18,352	56.8	Sri Lanka	2003-2005	870	15.8
India	2005-2007	3136	9.7	Bangladesh	2004-2006	1077	11.0
Indonesia	2005-2007	1431	4.4	Nepal	1999-2000/2003	62	9.9
Hong Kong, China	2005-2007	1428	4.4	Morocco	2005-2007	1158	9.1
Vietnam	2004-2006	1162	3.7	Madagascar	2005-2007	86	9.0
Morocco	2005-2007	1158	3.6	Jordan	2005-2007	304	7.5
Bangladesh	2004-2006	1077	3.5	Lesotho	2002-2004	45	7.5
Mexico	2005-2007	1116	3.5	Hong Kong, China	2005-2007	1428	7.0
Sri Lanka	2003-2005	870	3.1	Tunisia	2005-2007	551	4.4
				Guatemala	2005-2007	213	4.1
				Vietnam	2004-2006	1162	3.5
				Cape Verde	2005-2007	1	3.4

Notes: a) In which the country has reported its trade to the UN's Comtrade database. b) In the same three years as shown in the second or sixth column for the country concerned.
Source: UN Comtrade database (February 2009).

With respect to unit prices, huge discrepancies between countries are again evident. Since many, like China, report their volume figures only erratically, the picture may not be correct. According to China's figures for 1998-1999 (the only years for which complete volume data are available), it had the lowest unit value of all the countries in Figure 37 – less than one-fifth of Morocco's. It is apparent from the figure that the unit values for woven clothing are much lower in Asian than in North African countries. A possible explanation is North Africa's preferential access in the EU market. Morocco and Jordan benefit from free trade agreements with the EU, which allow their exports to enter the market duty free. China and India do not enjoy similar preferences in the EU or US market.

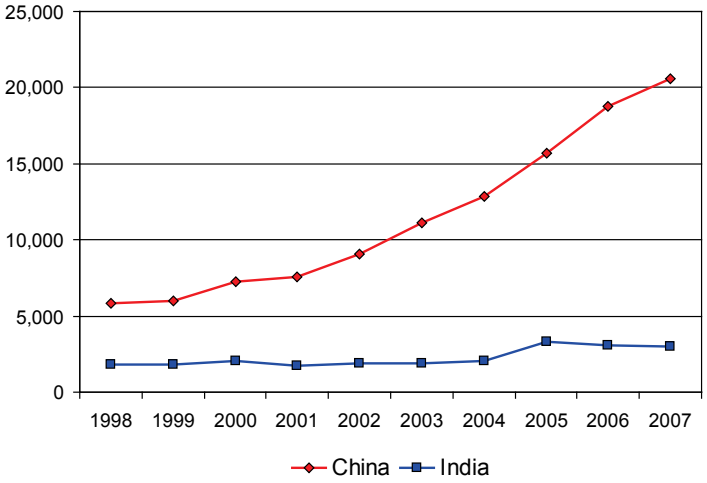
Figure 37: Woven female clothing – selected developing country export unit values, 1998-2007 (US$/item)



Note: * US$/kg.
Source: Calculated from value/quantity data from UN Comtrade database (February 2009).

From the data on export values we can see that China must have increased its export volumes greatly in the period 1998-2007 in order almost to quadruple the value of its exports (see Figure 38). For India, on the other hand, we can assume largely constant export volumes, since its total export value has not increased significantly in the past decade.

Figure 38: Woven female clothing – China's and India's exports, 1998-2007 (US$ million)



Source: UN Comtrade database (February 2009).

4. Policy implications and mitigation strategies

4.2 Policy implications

Commodity prices have shrunk considerably in the past year and are forecast to continue with a deflating trend as a result of declining demand and a supply overhang. For most commodities the stabilisation of prices at about the 2005 level is predicted by 2010/15 – which would be still at a comparatively high level. However, there are many uncertainties with these predictions of commodity prices, not least because we do not know whether a gradual recovery in 2010, as assumed by the World Bank, is realistic. Other analysts assume an L-shaped recession, i.e. that the crisis will be followed by a long period of very low growth rate. If it is true that 'recession gives way to depression' (Münchau, 2009), we can expect the demand for major commodities to decline further, which will particularly affect exporters of construction materials and simple manufactures. However, exporters of traditional commodities would also be affected; the crisis has already aggravated their problem of highly fluctuating prices.

So far, we have seen the following effects of the global financial crisis on commodity prices and demand:

- Construction materials such as aluminium and copper have been heavily affected since lower growth rates translate directly to decreased demand. In the case of aluminium and copper, it was largely China's building boom that drove demand and price increases. The economic downturn has already affected the construction sector and China will export greater production surpluses of aluminium and copper. This is likely to depress prices further, which will have dramatic consequences for metal-dependent exporters such as Zambia, Mozambique, Peru and Chile.
- Oil exporters have been heavily affected, with the price of crude oil declining sharply since October 2008 as a result of falling US demand. Although oil-dependent countries assume average prices when calculating their expected revenues, these are well above the current price.[19] However, given the global economic dependency on oil and the low usage of alternative energy resources, the World Bank expects oil prices to stabilise at high levels in the medium term. They have already increased from a low of $38.6/barrel in December 2008 to about $49/barrel by the end of March 2009.
- Gold prices are expected to remain high, reflecting investors' concerns about currency volatilities. This is good news for the most dependent gold exporters, Mali and Ghana, as well as for the main gold exporters, Peru and Hong Kong.
- For some traditional agricultural commodities, such as rubber and rice, price fluctuations have been aggravated by the crisis.

    - The price for rubber follows the oil price and is further driven by the demand for tyres. The downturn of oil prices and declining demand by the automotive industry has translated into price declines that are expected to go below the 2005 levels. However, developing countries' dependency on rubber as a revenue source is limited.
    - In 2006/07 rice prices were affected by the speculations for wheat (which in turn were influenced by diversion from wheat to maize production to benefit from high biofuels prices) and countries' protectionist policies. Increased supply occurred with a time lag and met stagnant demand, thus, resulting in falling prices. Since the speculations and protectionist policies have shaken global confidence in the rice market, increased stocking policies are expected. Increased price volatility will affect mainly the large exporters, Thailand, India, Vietnam and Pakistan, as well as net rice-importing countries.

19 In Angola an average price of $55/barrel is assumed, about $10 higher than the current price (Der Spiegel, 2009).

- Demand and prices for other traditional agricultural commodities, such as cocoa and coffee, are expected to be little affected by the crisis. Their income elasticity of demand is low, so that reduced income in developed countries is not expected to have significant effects on consumption. However, the position of cocoa and coffee producers in the global value chain might worsen as a result of the crisis, offering global companies the chance to reduce further the profit margin for producers. This is particularly likely to affect conventional producers that do not serve valued-added markets (such as fair trade or organic products).
- Non-traditional agricultural products like fruit and nuts, vegetables and flowers, show a higher income elasticity of demand than traditional agricultural commodities. It might, however, be the case that importing countries substitute imports with domestic horticultural products as a response to the global financial crisis. Moreover, non-traditional agricultural products might suffer from increased protectionism, e.g. in the form of more stringent product standards, 'carbon labelling' and other non-tariff barriers.[20] As reported by the World Bank, 17 of the G-20 countries have increased/introduced protectionist measures since the beginning of the crisis – with non-tariff border measures prevailing (Newfarmer and Gamberoni, 2009).
- Simple manufactured exports, such as computer equipment and clothing, are heavily affected by the crisis since their income elasticity of demand is high. Global competition for simple manufactured products is very stiff, with China leading in most product categories. For computer equipment, China was able to double its export volumes in the period 2002-2007 while at the same time increasing its unit value considerably. China might use the crisis to increase its supremacy, with the result that smaller economies that are highly dependent on the export of these products, such as Thailand, Bangladesh or the Philippines, might be squeezed out of the market.

Annex 2 gives a summary overview of the main and most dependent developing country commodity exporters. For crude oil, copper, cocoa, computer equipment and, to a lesser extent, cotton, gold and palm oil, the major exporters are also the most dependent. It is also apparent that various countries, such as Belize, Burundi, Cameroon, Ethiopia, Ghana, Guyana and St Vincent, face multiple commodity shocks affecting more than 50% of their total export revenue (see Table 17).

Major commodity exporters from Southeast Asia, such as Thailand or Indonesia, on the other hand, are less affected owing to their higher degree of diversification. However, Asian exporters that are highly dependent on simple manufactures for their total export revenue (such as Bangladesh, Laos and Cambodia) are at least as vulnerable to the crisis as African commodity exporters, since their products show the highest income elasticity of demand.

The more dependent the economies are on a few primary commodities, the more volatile are their terms of trade. As we can see from Figure 39, the most commodity-dependent economies, such as Mozambique, Ghana, Benin or Kenya, show the highest terms of trade volatilities, which have worsened sharply since the start of the crisis (IMF, 2009b: 7).

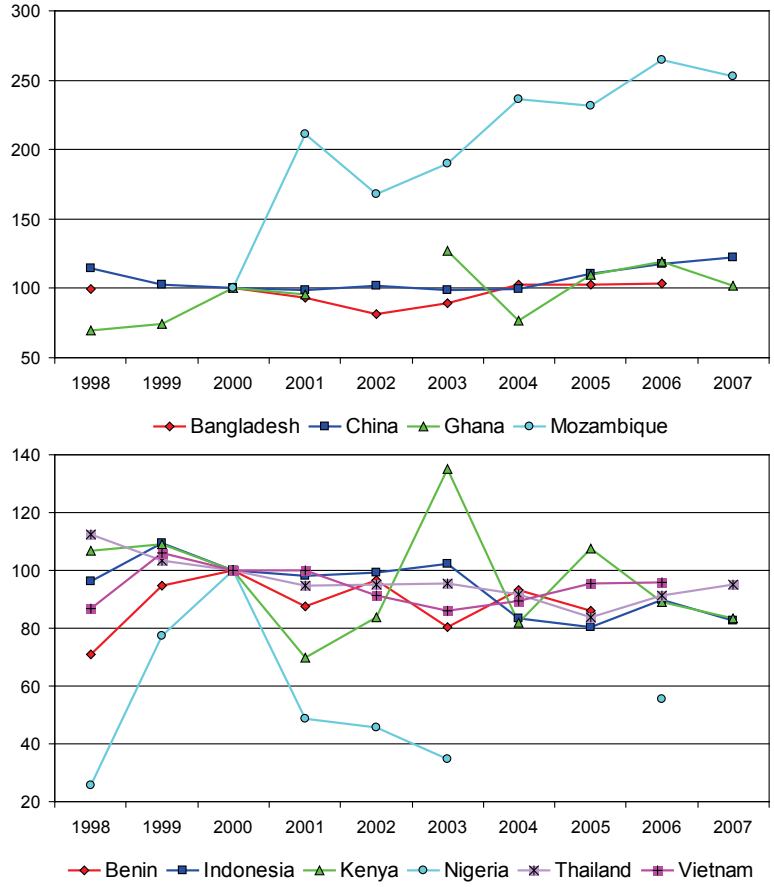
20 This would also affect EU preference-dependent exporters of non-traditional agricultural products, such as Belize, Côte d'Ivoire, Dominica, Dominican Republic, Ethiopia, East Timor, Kenya, São Tomé, Tonga and Uganda,

Table 17: Countries most affected by commodity and simple manufactures price changes

Country	Products affected	Combined share of total exports (3 latest years reported) (%)
Countries affected by multiple commodity price changes		
Belize	Sugar, crude oil, fruit and nuts	50.5
Brazil	Aluminium, crude oil, cocoa, coffee, sugar, fruit and nuts, gold, cotton	14.2
Burundi	Gold, coffee	77.9
Cameroon	Crude oil, cocoa, cotton, aluminium	61.2
Chile	Copper, fruit and nuts, flowers,	39.8
China	Aluminium, vegetables, computer equipment, woven female clothing, copper,	46.0
Colombia	Crude oil, coffee, flower, fruit and nuts, gold	34.8
Côte d'Ivoire	Cocoa, crude oil, natural rubber, fruit and nuts, cotton	46.9
Dominica	Fruit and nuts, vegetables	30.8
Dominican Republic	Fruit and nuts, sugar, cocoa, vegetables	24.3
Ethiopia	Coffee, flowers, vegetables, gold	61.1
Ghana	Gold, cocoa	61.1
Guyana	Sugar, gold, rice	51.0
Guatemala	Crude oil, woven female clothing, coffee, fruit and nuts, sugar,	32.3
India	Aluminium, vegetables, coffee, sugar, fruit and nuts, rice, cotton	4.8
Indonesia	Crude oil, palm oil, natural rubber, aluminium, woven female clothing, cocoa, coffee, copper	24.2
Honduras	Coffee, fruit and nuts, palm oil	37.0
Hong Kong	Gold, computer equipment, woven female clothing.	33.3
Kenya	Flowers, vegetables, coffee	20.3
Malaysia	Computer equipment, crude oil, palm oil, cocoa, natural rubber	20.8
Mexico	Crude oil, gold, computer equipment, woven female clothing, coffee, fruit and nuts, flowers, copper, vegetables	21.3
Nicaragua	Coffee, sugar, gold, vegetables	36.6
Papua New Guinea	Crude oil, gold, palm oil, coffee	49.4
Peru	Gold, copper, coffee	30.7
St Vincent and the Grenadines	Fruit and nuts, vegetables, rice	57.9
Tanzania	Gold, coffee, cotton	42.8
Thailand	Computer equipment, natural rubber, vegetables, sugar, rice, gold	15.7
Uganda	Coffee, gold, flowers, cotton	39.2
Vanuatu	Palm oil, cocoa, vegetables,	30.8
Vietnam	Crude oil, woven female clothing, rice, natural rubber, coffee, fruit and nuts	35.6
Countries heavily dependent on a single commodity		
Benin	Cotton	68.6
Burkina Faso	Cotton	68.7
East Timor	Coffee	96.4
Mozambique	Aluminium	60.2
São Tomé e Principe	Cocoa	88.7
Sierra Leone	*Coffee*	*86.5*[a]
Tonga	Vegetables	46.6
Zambia	Copper	67.6
Algeria, Brunei, Cameroon, Ecuador, Gabon, Iran, Iraq, Kuwait, Nigeria, Oman, Papua New Guinea, Qatar, Saudi Arabia, Syria, UAE, Venezuela, Vietnam, Yemen	Crude oil	Between 20% and 96% of export revenue (see Annex 2)

Note: According to figures reported by Sierra Leone for 2002 (the only year for which data are available). This proportion seems somewhat implausible given that Sierra Leone is a major exporter of diamonds (which were not included among its reported exports in 2002), and should perhaps be treated with caution.

Figure 39: Terms of trade for selected developing countries, index, 2000 = 100

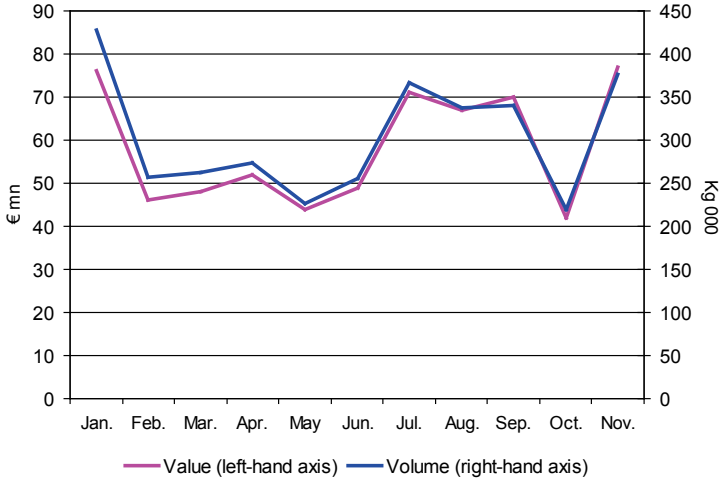


Source: Authors' calculations based on UN Comtrade import and export values.

Which commodity-dependent countries listed in Table 17 are most affected by the economic downturn, and what signs can we see so far? As discussed, oil, aluminium, copper, computer equipment and clothing are among the products most affected by the global financial crisis.

In the EU, demand for *aluminium* declined slightly in the second half of 2008 while no such trend is yet visible for the US. As can be seen from the figures in Annex 3a, declining EU demand affected developing countries quite differently. While there is a declining trend in October/November for China and India, Brazil and Mozambique register increased demand in November 2008, which was particularly pronounced for the latter (see Figure 40). US aluminium imports from China, India and Brazil also show a sharp recovery in December 2008 compared with November 2008 (see Annex 3b).

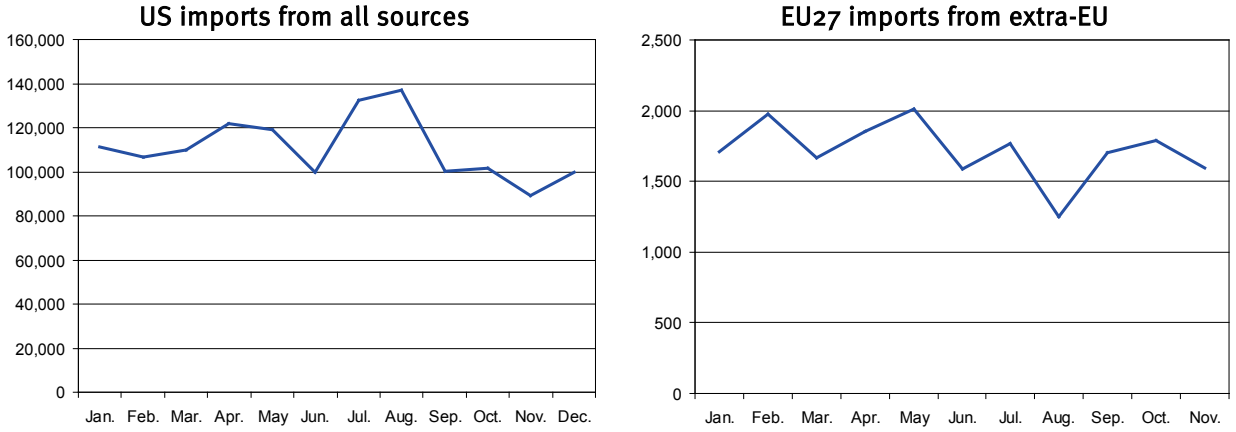
Figure 40: EU aluminium imports from Mozambique, 2008 (kg 000)



Source: Eurostat COMEXT database (March 2009).

EU and US *copper* imports declined in November 2008 but in the case of the US recovered slightly in December.[21] It is surprising that the US reported increasing imports in December 2008. However, the general trend for US copper imports has been negative since August 2008 whereas for the EU the negative trend is less pronounced (Figure 41).

Figure 41: US and EU copper imports, 2008 (kg 000)



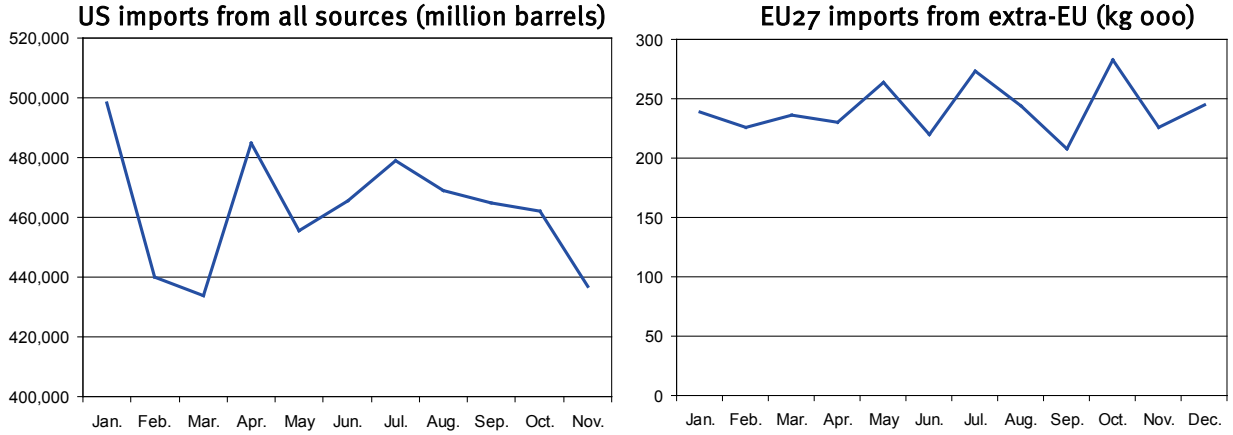
Note: This shows only imports recorded in kg; there are small additional figures for imports in m^2.
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Source: Eurostat COMEXT database (March 2009).

For EU and US *gold* imports, no clear volume trend is discernible in 2008 (see Annex 3).

Demand for *crude oil* has declined quite sharply in the EU since September 2008 but we cannot see a similar picture for the US, where imports have remained comparatively stable (see Figure 42).

Figure 42: US and EU crude oil imports, 2008 (million barrels and kg 000)



Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

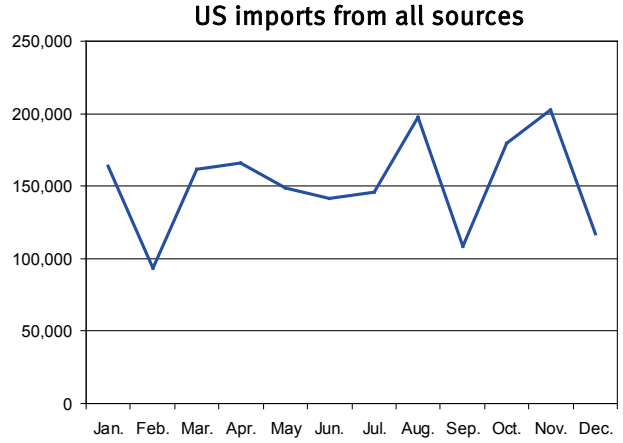
Source: Eurostat COMEXT database (March 2009).

For *natural* rubber, we see a downward trend in demand from the EU in 2008 (from about 1.2 million to 1 million kg) and fluctuating monthly import figures from the US (see Annex 3).

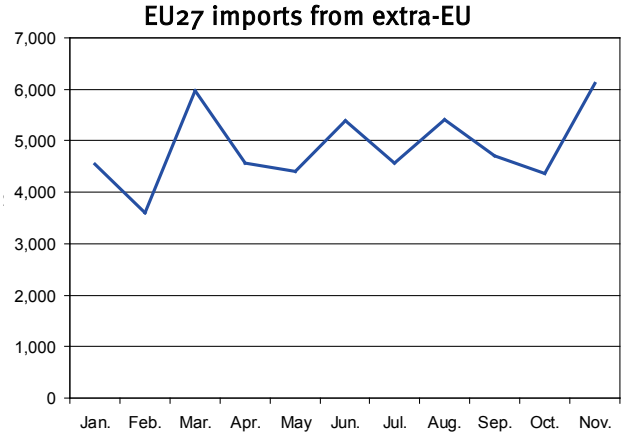
For *palm oil*, there was a sharp increase in both EU and US imports in November 2008, followed in the US by a sharp decline in December (Figure 43).

21 For EU27 no December 2008 import figures were available at the time of writing (12/03/09).

Figure 43: US and EU palm oil imports, 2008 (kg 000)



Source: USITC Interactive Tariff and Trade DataWeb (March 2009).



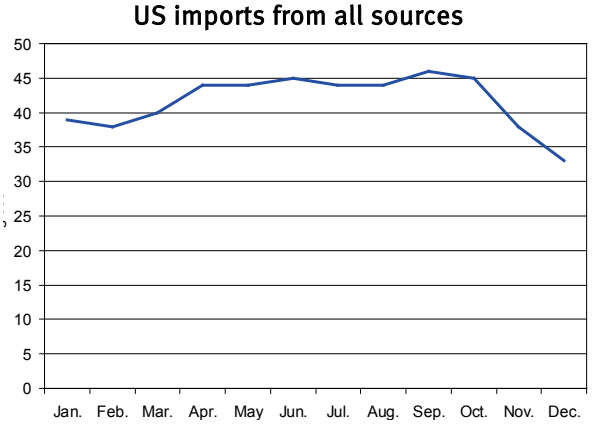
Source: Eurostat COMEXT database (March 2009).

As the figures in Annex 3 demonstrate, we cannot yet see a clear trend of declining EU and US demand for the single commodities.[22] The fluctuations are erratic and do not yet indicate a declining trend as a response to the crisis – either for total imports or for those from selected developing countries.

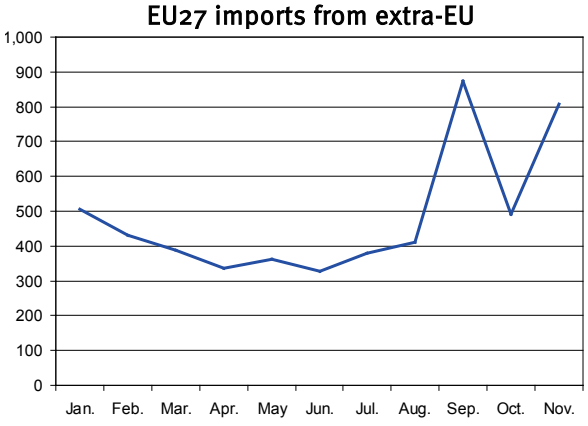
A similar picture arises for the non-traditional commodities such as vegetables, fruit and nuts and flowers (see Annex 3). When looking at US and EU imports from selected countries, we cannot identify any similarities either: while, for instance, US *fruit and nut* imports from Brazil increased sharply in November and dropped sharply in December, those from for Chile dropped in November and rose in December. The same applies to EU fruit and nuts imports from selected developing countries: imports from Brazil rose sharply in the period September-November 2008, while those from Chile dropped in the same period.

Even for *computer equipment*, where we would expect a clear signal of decreased demand, such a trend can only be observed in the US (October-December 2008), while demand in the EU fluctuated from September-November 2008 (Figure 44). For imports by country, we can only observe a clear volume downturn for EU imports from Thailand in November 2008 and US imports from China and Malaysia in December 2008 (see Annex 3).

Figure 44: US and EU computer equipment import, 2008 (kg 000)



Source: USITC Interactive Tariff and Trade DataWeb (March 2009).



Source: Eurostat COMEXT database (March 2009).

22 A very dissimilar picture between EU and US import figures is evident for cocoa, for which the EU reports declining total imports whereas the US import figures fluctuate (and show a sharp increase in December). For coffee, somewhat stagnant imports were registered in 2008 by both the EU and US, while both markets' cotton imports show a declining, volatile trend (see Annex 3).

US *clothing* imports were largely static in 2008 (with a decreasing tendency), while EU clothing imports show a sharp decline in October/November 2008 which affected China, Indonesia and Vietnam negatively (see Annex 3).

It is surprising that we do not see a clear trend of falling demand for computer equipment and clothing, since inputs for these products and semi-finished articles cross borders several times. Because of the vertical specialisation of companies, we would expect to see much faster trade falls than is the case with primary commodities.

4.2 Country-specific trade strategies to mitigate the effects of the crisis

The expansion of export volumes is, in theory, one policy option to compensate for price losses. It carries a risk, however, of depressing prices even further if expanded volumes meet a stagnant demand. This is a particular risk when large exporters or several main exporters pursue such an expansion strategy. An additional risk is increased protectionism in the import market as a result of increased exports. This appears to be particularly problematic for simple manufactured goods such as clothing and apparel, as well as for selected sensitive agricultural products. The expansion of manufactured exports as a counterbalance to reduced prices is likely to be further constrained by industries' high dependency on raw material imports, which are difficult to finance owing to weakened domestic currencies and restrictive trade finance conditions.

For computer equipment and women's clothing, we do not see that major exporting countries responded with increased volumes in or soon after the 1997 crisis. However, it is reported that restrictive trade finance conditions and low prices for producers at the end of the value chain had been 'locked in'; i.e. they prevailed beyond the crisis. Most Asian producers of simple manufactures are caught in buyer-driven chains; i.e. they are price takers and have not developed niche products or services that would give them a competitive advantage and options to influence the price of demand. The Asian crisis worsened the position of small-scale producers vis-à-vis the lead firm and further decreased their options for domestic value added (Barichello, 1999; Ernst, 1999).

It appears that commodity exporters are also well aware of the risks of expanding volumes in an economic downturn. The low-price periods for sugar, cotton, palm oil and cocoa (2000/01) were hardly accompanied by expanded exports from the major exporters (see Annex 1). For cocoa and cotton we see even lower volumes as a response to price drops. The commodity price boom in the period 2005-2007, on the other hand, was largely met by increased volumes, e.g. for aluminium, copper, cocoa and coffee. This pro-cyclical response appears to be the best strategy to benefit from commodity resources. To reduce the shocks in times of low commodity prices, however, it would be necessary to manage the resources well, to invest in alternative export products and gradually to diversify the economy. However, many developing countries struggle to manage booming commodity prices in a sustainable way and instead increase their dependency on the commodities in question.[23]

Since expanded exports are not the right response to compensate for low commodity prices in an economic crisis, developing countries might divert their commodity exports to the domestic market, which is likely to require increased protectionist measures. Likely candidates are commodities that are largely managed by parastatals, such as sugar or coffee. To compensate for export revenue losses producers may call for subsidies or protectionist measures to direct surpluses to the domestic market (such as increased tariffs/minimum prices). Such policy response would harm poor consumers and might have negative consequences for the export competitiveness of the commodity in the medium term.

23 This has for instance been the case for the ACP countries, which enjoyed unilateral preference in the EU market in the period 1975-2007 but did not manage either to expand significantly or to diversify their exports.

Further possible trade policy responses could be increased most-favoured nation (MFN) tariffs (possibly up to the rates bound at the World Trade Organization – WTO), which countries might want to undertake to offset for decreased export revenues. The risks of such a policy approach depend on whether tariffs are selectively increased for revenue-sensitive items or across the board (which is likely to have a negative impact on poor consumers and can harm producers that source inputs for re-exports). Other possible negative implications are decreased investments (as a result of increased prices for capital goods) and inflationary tendencies. Moreover, it needs to be considered that the response of tariff increases is limited not only by the WTO but, for most countries, also by bilateral and regional treaties.

Some countries have already applied 'beggar thy neighbour' policies as a response to the crisis. The depreciation of currencies of large economies like India, Brazil, Chile, South Africa and Nigeria vis-à-vis the US dollar is at the expense of small neighbouring countries which have neither the fiscal policy space to devalue their currencies[24] nor an independent fiscal and monetary policy (e.g. members of the West African Economic and Monetary Union (UEMOA) that have a common currency tied to the euro).[25] Moreover, we see that various countries have raised several forms of protectionist measures – including tariffs, non-tariff barriers and subsidies.[26]

In addition to these defensive trade policies, many countries have also pursued offensive policies such as credit guarantees to support exports[27] and minimise the risk for banks[28] or the introduction of fiscal stimuli programmes. However, in many developing countries, fiscal stimulus programmes are constrained by their weak fiscal position and high debt levels. Only the more developed countries have sound macroeconomic conditions that have already enabled them to agree to comprehensive stimulus packages (Capital Economics, 2009). The IMF (2009b) identified 33 developing countries that have only low fiscal space but that are high or medium exposed to the effects of the financial crisis. A further 38 countries have 'some fiscal space' but not sufficient to cover the additional spending needed to cope with the fallouts and to finance programmes in order to mitigate the economic and social effects of the crisis. Additional aid flows are needed to support these countries but not all of them have the institutional capacity to absorb increased spending. About one-quarter of the highly and medium exposed countries with limited fiscal space have only poor institutional capacities and are not expected to effectively absorb increased spending. These countries, which also show very high or high poverty levels and growth decelerations, are, however, in most critical need of financial and technical support to cope with the effects of the crisis.[29]

Low fiscal space, high external debts and high aid inflows require fiscal prudence which limits the interventionist policy options for many developing countries, particularly in Africa. The African

24 Country representatives reported at a Workshop on the Financial Crisis on 11 February 2009 in London that Bangladesh is suffering from a 25% depreciation of India's and Pakistan's currencies, which has resulted in decreased competitiveness of the local spinning industry, which now sources from neighbouring countries – thus increasing the risk of introducing protectionist measures. Similarly, Bolivia reported that the devaluation of Chile's and Brazil's currencies in the past years has increased the country's import to GDP ratio from 21to 72%.

25 UEMOA is the continuation of previous regional arrangements dating back to 1945, under which member countries have a common currency, the CFA franc, tied to the French franc (today the euro).The French Treasury (today the European Central Bank) guarantees free convertibility at a fixed parity between the euro and the CFA franc.

26 Examples range from Ukraine, where Parliament passed a bill that imposes an additional 13% tariff on almost all imports, to Russia's increase of tariffs and import quotas, to US and EU bailouts for their car industries. Moreover, increased protectionist tendencies have been observed for the steel and mining industries, the chemical industry and the textile and apparel industry. Another issue of concern is that the relevance of non-tariff barriers as trade defensive instruments has been increased (Meyn, 2008).

27 For example, Brazil has offered a blanket guarantee for all trade credit involving its companies – a commitment of $20 billion (€15 billion, £12 billion) or one-10th of its foreign exchange reserves. The Monetary Authority of Singapore has set up a swap facility to provide US dollar liquidity for banks operating in Singapore.

28 Governments could also make use of the World Bank's Global Trade Finance Program (GTFP), through which the International Finance Corporation (IFC) can guarantee the payment risk of issuing banks up to the full value of a transaction.

29 The IMF (2009b) identified Belarus, Burundi, Cambodia, Central African Republic (CAR), Comoros, the Democratic Republic of Congo (DRC), Gambia, Guinea, Guinea-Bissau, Haiti, Ivory Coast, Laos, Liberia, Tajikistan and Togo as high and medium exposed countries that have low institutional capacities and limited fiscal space.

Development Bank (AfDB, 2009) expects the economic crisis to worsen the continent's macroeconomic balances further by decreased revenue from exports and tourism as well as declining remittances, capital inflows, and domestic and foreign investment. Given these unfavourable external conditions, it is recommended that African countries concentrate on the promotion of domestic growth drivers, i.e. on supporting those industries that are responsible for a large share of employment and economic growth.

4.3 International trade policy responses

4.3.1 Fighting protectionist tendencies

Developing countries are heavily affected by the global financial crisis and need open export markets to help them mitigate the negative effects on their economies. Industrialised countries have the choice of implementing short-sighted protectionist measures, thereby prolonging and aggravating the crisis, or responding with offensive trade policies, thus ensuring that long-term development interests prevail. Protectionist measures will mete out additional punishment to these most vulnerable developing economies. It is disturbing to see new protectionist measures emerging among most G-20 countries, such as increased tariffs and subsidies as well as thoughts about increased product standards.

The impact of protectionist measures on global welfare is magnified by the fact that, in today's highly interdependent global economy, protectionism will hurt not only exporters of the final product but also those in several other countries involved in its production process. If, for instance, the US raises protectionism against imported cars, this affects not only major exporters such as Germany but also several other countries which contribute (as, for example, suppliers of steel or the main place of assembly) to the production process. Owing to the global division of labour, protectionist measures affect global trade much more today than in the past.

While it is acknowledged that the successful conclusion of the WTO Doha Development Round would be desirable to discipline the maximum application of tariffs and subsidies, it needs to be borne in mind that the WTO offers no insurance against the application of protectionist measures such as domestic subsidies or restrictive product standards. Moreover, the Doha Round has an ambitious agenda which is unlikely to be achieved in the current economic climate (see Meyn et al., 2009). Instead of pushing for a minimalistic consensus, which runs the risk of damaging the institution of the WTO, policymakers should instead concentrate on more urgent trade issues, such as:

- Resisting domestic pressures to apply protectionist measures and openly opposing protectionist measures taken by any G-20 member; for instance, the Czech and German governments have set a good example by questioning French support for cars that are produced in France;
- Avoiding the introduction of new formal or informal product standards, labelling requirements and so on, intended to encourage discrimination against imports;
- Supporting the surveillance process that the WTO has put in place to track the new protection measures applied by members and encouraging it to cover a broad range of potentially distorting measures;
- Coordinating fiscal stimuli programmes with the objective of disciplining trade-distorting impacts and avoiding discrimination against foreign firms.

Thus, the G-20 countries can still demonstrate that they are serious about complying with international trade obligations by fighting any form of new protectionism at home and by supporting developing countries in accessing their markets.

4.3.2 Ensuring sustained trade finance

According to Hoekman (2008), around 80% of the $14 trillion in world trade is financed by open accounts and 20% by way of documentary credits such as letters of credit. He notes that liquidity is drying up as a response to the crisis and risk premiums are increasing; the cost of obtaining letters of

credit is rising, as is credit insurance. Large developing countries, such as Brazil, India and Argentina, together with the WTO and World Bank, have raised serious concerns about trade finance. Consequently, the World Bank is expanding its GTFP particularly to help banks in Africa which lend mainly to small and medium enterprises. Additionally, the Bank is creating a Global Trade Liquidity Pool which, with the involvement of a number of global and regional banks, will increase the use of guarantees for trade transactions (World Bank, 2009b).

However, the importance of trade finance differs significantly among developing countries and sectors, depending on their position in international value chains. In Africa, for instance, we do not have much evidence that exporters are affected by a lack of trade finance. None of the six African country case studies undertaken with ODI as part of this project[30] indicates that trade finance has yet been a problem for their exporters. Similarly, a survey among Kenyan exporters of horticulture and garments found that firms' capacity to export has not been affected by cutbacks in trade credits (Humphrey, 2009). This is explained by the fact that the (foreign-owned) firms are operating in well-established global chains and are considered as 'good risks' by banks.

It is important that trade finance be available and that, if necessary, international organisations step in to secure it. However, this should be the case only where exporters' access to trade finance is a serious problem; otherwise, such action is likely to crowd out domestic banks.

4.3.3 Providing effective and timely Aid for Trade

The global financial crisis is increasing developing countries' need for effective and timely Aid for Trade (AfT). They are being affected by a combination of falling export volumes and prices and depreciation of their currencies, and for many the consequence will be worsening trade deficits, fiscal challenges and increased foreign debt levels. Though additional aid should be provided to protect social expenditure and progress in reducing poverty, it is critical to ensure that assistance is also given to countries' productive and institutional capacities and trade infrastructure. The G-20 countries need to renew their AfT commitments and make clear that such funds will be increased without reducing other aid commitments. This requires a consistent definition of AfT to avoid the danger of existing aid activities, such as infrastructure projects, simply being relabelled as AfT. In particular for the wider AfT agenda, it is often questionable whether a specific project is related to trade or not. It is therefore important to improve the definition and measurement of AfT projects following the WTO Task Force on Aid for Trade, according to which 'projects and programmes should be considered as Aid for Trade if these activities have been identified as trade-related development priorities in the recipient country's national development strategies' (WTO, 2006).

As well as ensuring that *additional* funds are available to support developing countries in coping with the effects of the global financial crisis, it is necessary to ensure that these funds respond *adequately* to countries' needs. This will require developing countries to exercise strong leadership and donors to give centrality to national development plans. The AfT framework needs to be tightened up to ensure that the aid is adequate and made available in an appropriate and timely way to deal with the actual, new costs resulting from the crisis.

It is necessary to commit bilateral and multilateral donors to make resources available immediately for countries' high-priority needs and to identify medium-term needs as soon as possible.

Donors should speed up needs assessment exercises as a response to the crisis and define the actions required at national and regional levels in the most precise way possible. Private sector and civil society actors in the recipient country should be involved in identifying support needs. In order to enable small and vulnerable economies to take the lead in identifying their national AfT needs, donors should aim to support institutional capacity building, including the exploration of innovative delivery mechanisms.

30 Benin, Ghana, Kenya, Nigeria, Uganda and Zambia. Moreover, the four non-African case studies – Bangladesh, Bolivia, Cambodia and Indonesia – did not report difficulties on trade finance either.

Monitoring mechanisms are required to ensure that the first tranches of AfT in response to countries' needs are provided now – because if they arrive too late they will be useless. And last but not least, continued political pressure will be important to make sure that the delivery of AfT continues after the crisis slips out of the spotlight. The impact of the crisis on developing countries is severe and will be fully understood only in a couple of years' time. Continuing aid to help developing countries cope with its full effects on their economies will be essential.

4.3.4 Offering more generous rules of origin

LDCs and most ACP countries enjoy DFQF access to the EU market. LDCs and African countries also enjoy significant preferences in the US market. Additionally, a range of developing countries enjoy unilateral preferences: for example, a range of Latin American and Eastern European countries under the EU's GSP+ and Caribbean countries under the US Caribbean Basin Initiative.

In short, the EU and US markets are largely open for exports from small developing countries. Therefore, improved rules of origin are the last preferences that can be granted, either unilaterally to LDCs or reciprocally to FTA partners.[31] In fact, developing country exports are to a large extent still constrained by restrictive origin rules. While important improvements have taken place in the past decade with respect to manufactured products (such as the US's AGOA, which resulted in increased Asian investment in the African apparel industry and a consequent 'boom' in African exports to the US, or the recent EU decision to allow the import of single transformation garments from selected trading partners), this is not yet the case for all goods. Agro-processed exports in particular face restrictive rules of origin that make it difficult for developing countries to access the EU and US markets. An Overseas Development Institute (ODI) study found that the proportion of value added in developing countries varies widely, from a high mean of 61.7% to as low as 12.8%. The authors conclude that normal commercial variation will be difficult to incorporate into any system using value-added thresholds unless these are set a very low level. Consequently, they recommended reducing the required thresholds to 13% – which is less than half of what the European Commission (EC) considered to be adequate for LDCs (Stevens and Kennan, 2007).

Granting LDCs and selected free trade agreement (FTA) partners more generous rules of origin for agro-processed products would be a powerful signal that the EU and the US could send to developing countries. It could help to stimulate investment and expand and diversify exports, which in turn would help to mitigate the negative implications of the global financial crisis. Given the powerful agricultural lobbies, particularly in the EU market, it might only be politically feasible to start with a few products. However, as the examples of the US AGOA initiative or the EU's permitting Pacific economic partnership agreement (EPA) states to process fish outside their waters without losing originating status have shown, a few product lines can make a big difference.

31 To be in line with the basic principles of the WTO.

5. Conclusions

The global financial crisis affects developing countries' trade through price and volume effects. The gravity of the effects depends on developing countries' trade structure and markets as well as on their economic and institutional conditions which determine possible responses.

Construction materials such as aluminium and copper are potentially heavily affected, since lower growth rates translate directly into decreased demand. Although we cannot see any clear trends of decreasing demand by the EU and the US yet, this might well be explained by the time-lag in data availability, which currently allows us to monitor imports only until November (EU) or December (US) 2008. Close monitoring of import volumes in the months to come will therefore necessary.

As with construction materials, we expect simple manufactured exports to be severely affected by the crisis due to a high elasticity of demand. Stiffened competition is likely to benefit China at the expense of smaller suppliers, which risk being squeezed out of the market. Agricultural commodities show a lower elasticity of demand, although non-traditional products, such as fresh fruit or flowers, might be more affected by declining demand and protectionist measures. However, the global financial crisis has been aggravating price fluctuations for traditional commodities such as rubber, wheat, maize and rice through oil and food price speculations. While falling commodity prices have negative implications for exporters, the falling oil and food prices benefit importing economies, reducing their import bill substantially and helping to reduce inflation. However, these positive effects have been largely outweighed by the appreciation of the US dollar in foreign exchange markets, which also increases the costs of countries' debt service.

National trade policy options to mitigate the effects of the crisis are limited. The expansion of exports is unlikely to compensate for revenue losses and risks accelerating price declines. Directing exports to the domestic market and regional markets might be an option for some countries but would often require the application of increased protectionist policies – which risk harming producers and reducing the international competitiveness of the product in the medium term. Some countries have already raised tariffs and non-tariff barriers on imports and introduced subsidies for domestic production. Such policies are, like the devaluation of domestic currencies vis-à-vis the US dollar, at the expense of neighbouring countries, thus undermining their ability to export.

Moreover, many developing countries are incapable of applying interventionist policies (such as fiscal stimuli programmes, supporting trade finance or subsidising companies) owing to high current account deficits, debts and double-figure inflation rates. Additional financial and technical support that goes beyond the current aid levels is therefore required to help developing countries to mitigate the effects of the crisis. Furthermore, G-20 countries should do their utmost to ensure that their markets remain open for developing countries' exports and resist domestic pressures to apply protectionist and trade-distorting measures.

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Annex 1: Selected developing country exports, 1998–2007

Product group	Developing country exporter	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg. annual change [a]
Aluminium (SITC 684)													
Main DC exporters	China	$ mn	690	491	624	929	1556	2,454	3919	4330	6701	7,282	30%
		Kg mn	436	301	339	544	976	1,518	2114	2030	2452	2,403	21%
		$/kg	1.6	1.6	1.8	1.7	1.6	1.6	1.9	2.1	2.7	3.0	7%
	Brazil	$ mn	1083	1214	1434	1102	1218	1437	1799	1846	2694	2,872	11%
		Kg mn	745	874	880	702	854	957	1001	922	1030	1,023	4%
		$/kg	1.5	1.4	1.6	1.6	1.4	1.5	1.8	2.0	2.6	2.8	8%
	South Africa	$ mn	55	821	867	821	888	956	1388	1610	2056	2,201	51%
		Kg mn	n.q.	667	572	538	638	775	763	863	797	772	2%
		$/kg	n.q.	1.2	1.5	1.5	1.4	1.2	1.8	1.9	2.6	2.9	11%
Most dependent DC exporters	Mozambique	$ mn	-	0.004	60	383	361	568	915	1021	1402	1,516	396%
		Kg mn	-	n.q.	38	251	239	374	215	567	779	614	49%
		$/kg		n.q.	1.6	1.5	1.5	1.5	4.3	1.8	1.8	2.5	7%
	Bahrain	$ mn	n/a	n/a	777	825	772	859	909	1298	1414	1,223	7%
		Kg mn	n/a	n/a	455	486	465	506	499	668	697	452	0%
		$/kg	n/a	n/a	1.7	1.7	1.7	1.7	1.8	1.9	2.0	2.7	7%
Petroleum oils and oils obtained from bituminous minerals, crude (SITC 333)													
Main DC exporters	Saudi Arabia	$ mn	27,354	36,946	62,013	50,889	55,071	70,641	92,856	137,176	162,219	180,030	23%
		Kg mn	n.q.	738,762	n.q.	n.q.	262,328	324,891	365,560	375,506	351,065	346	-62%
		$/kg	n.q.	0.1	n.q.	n.q.	0.2	0.2	0.3	0.4	0.5	520.9	218%
	Venezuela	$ mn	7,788	10,775	18,238	14,756	18,323	20,236	32,637	47,095	56,229	n/a	28%
		Kg mn	n.q.	n.q.	n.q.	n.q.	n.q.	n.q.	3971	114,886	112,603	n/a	433%
		$/kg	n.q.	n.q.	n.q.	n.q.	n.q.	n.q.	8.2	0.4	0.5	n/a	-75%
	Iran	$ mn	10,228	16,649	24,800	19,762	19,219	26,124	34,289	48,286	50,224	n/a	22%
		Kg mn	126,749	99,683	123,844	108,558	104,036	119,078	133,380	118,989	138	n/a	-57%
		$/kg	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	364.0	n/a	186%
Most dependent DC exporters	Iraq	$ mn	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	28,610	39,531	38%
		Kg mn	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.q.	n.q.	
		$/kg	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n.q.	n.q.	
	Nigeria	$ mn	6659	15,952	26,905	17,732	16,598	23,211	n/a	n/a	54,916	n/a	30%
		Kg mn	78,492	152,042	137	99	87	794	n/a	n/a	3810	n/a	-31%
		$/kg	0.1	0.1	196.9	178.5	191.4	29.2	n/a	n/a	14.4	n/a	90%
	Yemen	$ mn	n/a	n/a	n/a	2928	2819	3069	3576	4755	5376	4940	9%
		Kg mn	n/a	n/a	n/a	173	160	17,402	13,622	12,838	13,174	9107	94%
		$/kg	n/a	n/a	n/a	16.9	17.7	0.2	0.3	0.4	0.4	0.5	-44%
	Gabon	$ mn	2133	1586	2118	2057	1,970	11	2079	4185	5078	n/a	11%
		Kg mn	18,061	14,578	12,619	12,202	11,268	54	7926	9852	8529	n/a	-9%
		$/kg	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.6	n/a	22%
	Oman	$ mn	3586	5376	8727	7633	7,424	8289	9079	13,189	14,378	14,443	17%
		Kg mn	41,177	42,118	44,689	45	n.q.	n.q.	30,315	30,220	31,884	30,356	-3%
		$/kg	0.1	0.1	0.2	168.4	n.q.	n.q.	0.3	0.4	0.5	0.5	21%

Product group	Developing country exporter	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg. annual change [a]
	Brunei	$ mn	778	n/a	n/a	1556	1,689	2022	n/a	n/a	5141	n/a	27%
		Kg mn	6578	n/a	n/a	8,794	9,310	9514	n/a	n/a	9793	n/a	5%
		$/kg	0.1	n/a	n/a	0.2	0.2	0.2	n/a	n/a	0.5	n/a	20%
	Kuwait	$ mn	4502	5442	11,176	9587	n/a	n/a	16,653	n/a	n/a	n/a	24%
		Kg mn	70	56	61	63	n/a	n/a	72	n/a	n/a	n/a	1%
		$/kg	64.4	98.0	181.8	152.7	n/a	n/a	230.5	n/a	n/a	n/a	24%
	Algeria	$ mn	4084	4975	9254	7133	7,956	11,346	17,570	24,519	30,384	33,799	26%
		Kg mn	34,298	36,505	40,556	36,438	43,136	49,314	56,054	57,462	57,640	57,444	6%
		$/kg	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6	19%
	Ecuador	$ mn	789	1312	2144	1722	1,838	2372	3899	5397	6934	7428	28%
		Kg mn	11,999	11,840	12,056	12,574	11,785	12,929	18,099	18,405	19,110	17,356	4%
		$/kg	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.4	0.4	23%
	Qatar	$ mn	2985	4013	3841	5610	2,881	6717	8529	12,843	15,981	19,181	23%
		Kg mn	37,720	35	31,735	n.q.	30,963	32,577	32,892	63,676	34,140	37,089	0%
		$/kg	0.1	113.5	0.1	n.q.	0.1	0.2	0.3	0.2	0.5	0.5	23%
	UAE	$ mn	n/a	14,044	22,011	16,606	14,357	21,010	28,580	40,573	53,960	n/a	21%
		Kg mn	n/a	n.q.	n.q.	n.q.	n.q.	n.q.	n.q.	127,388	n.q.	n/a	
		$/kg	n/a	n.q.	n.q.	n.q.	n.q.	n.q.	n.q.	0.3	n.q.	n/a	
	Cameroon	$ mn	n/a	n/a	875	807	828	1003	1019	840	1782	n/a	13%
		Kg mn	n/a	n/a	5383	4896	5034	4410	4900	3895	4395	n/a	-3%
		$/kg	n/a	n/a	0.2	0.2	0.2	0.2	0.2	0.2	0.4	n/a	16%
Computer equipment (SITC 752)													
Main DC exporters	China	$ mn	7067	7922	10,994	13,094	20,132	41,017	59,911	76,299	93,017	112,244	36%
		Items mn	322	436	554	544	679	935	1130	1305	1426	1365	17%
		$/item	22.0	18.2	19.8	24.1	29.7	43.9	53.0	58.5	65.2	82.2	16%
	Malaysia	$ mn	5271	6416	7181	7777	7997	8422	11,428	14,021	16,322	16,168	13%
		Items mn	44	89	71	111	40	32	60	75	460	161	16%
		$/item	120.4	72.2	101.0	70.0	197.7	264.8	189.3	186.3	35.5	100.6	-2%
Most dependent DC exporters	Philippines	$ mn	2411	3610	4644	4134	4686	4108	4238	4081	4666	3941	6%
		Qty mn [b]	29	47	21	30	29	28	22	25	25	p.q.	-2%
		$/qty	83.2	76.5	216.5	136.7	163.0	148.7	195.1	161.9	186.8	p.q.	11%
	Thailand	$ mn	1811	1935	1997	1785	2828	4499	5351	8343	10,850	12,575	24%
		Items mn	22	52	61	55	81	139	147	393	675	p.q.	53%
		$/item	82.6	36.9	32.5	32.6	34.7	32.4	36.4	21.2	16.1	p.q.	-19%
Women's and girls' clothing, not knitted or crocheted (SITC 842)													
Main DC exporters	China	$ mn	5807	6032	7270	7581	9050	11,103	12,833	15,712	18,748	20,597	15%
		Items mn	1393	1475	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	6%
		$/item	4.2	4.1	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	p.q.	-2%
	India	$ mn	1833	1778	2030	1733	1887	1893	2020	3324	3112	2972	6%
		Items mn	372	354	407	363	390	p.q.	p.q.	p.q.	p.q.	p.q.	1%
		$/item	4.9	5.0	5.0	4.8	4.8	p.q.	p.q.	p.q.	p.q.	p.q.	0%

Most dependent DC exporters	Sri Lanka	$ mn Items mn $/item	n/a n/a n/a	797 128 6.2	n/a n/a n/a	767 127 6.0	752 136 5.5	851 145 5.9	892 147 6.0	866 p.q. p.q.	n/a n/a n/a	n/a n/a n/a	1% 3% -1%
	Bangladesh	$ mn Items mn $/item	641 178 3.6	n/a n/a n/a	798 p.q. p.q.	760 p.q. p.q.	745 p.q. p.q.	828 p.q. p.q.	986 p.q. p.q.	1061 p.q. p.q.	1184 p.q. p.q.	n/a n/a n/a	8%
	Nepal	$ mn Items mn $/item	15 4 3.7	57 n.q. n.q.	62 18 3.4	n/a n/a n/a	n/a n/a n/a	68 11 6.5	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	35% 20% 12%
	Morocco	$ mn Kg mn $/kg	793 32 25.1	789 33 23.9	778 37 21.3	780 39 20.2	850 41 20.8	1021 39 26.4	1071 39 27.5	974 p.q. p.q.	1212 p.q. p.q.	1289 p.q. p.q.	6% 4% 2%
	Madagascar	$ mn Kg mn $/kg	1 0.04 14.8	1 0.04 17.9	40 p.q. p.q.	44 p.q. p.q.	18 p.q. p.q.	61 p.q. p.q.	89 p.q. p.q.	74 p.q. p.q.	73 p.q. p.q.	111 p.q. p.q.	78% 4% 21%
	Jordan	$ mn Kg mn $/kg	19 2 9.7	22 2 9.8	55 5 11.1	22 2 10.0	29 3 10.3	148 12 12.7	219 18 12.5	321 p.q. p.q.	319 p.q. p.q.	273 p.q. p.q.	34% 44% 4%
	Lesotho	$ mn Items mn $/item	n/a n/a n/a	n/a n/a n/a	28 n.q. n.q.	8 n.q. n.q.	1 n.q. n.q.	80 15 5.4	54 7 7.5	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	18% -51% 39%
Vegetables, fresh, chilled, frozen or simply preserved (SITC 054)													
Main DC exporters	Mexico	$ mn Kg mn $/kg	2032 2946 0.7	2017 3275 0.6	2164 8520 0.3	2320 3087 0.8	2237 3177 0.7	2609 3267 0.8	2992 3296 0.9	3117 3426 0.9	3474 3684 0.9	3553 3764 0.9	6% 3% 4%
	China	$ mn Kg mn $/kg	1234 2169 0.6	1261 2727 0.5	1265 2631 0.5	1486 3224 0.5	1625 3945 0.4	1876 4731 0.4	2130 4843 0.4	2558 5362 0.5	3091 5644 0.5	3388 6152 0.6	12% 12% 0%
Most dependent DC exporters	Tonga	$ mn Kg mn $/kg	n/a n/a n/a	n/a n/a n/a	4 n.q. n.q.	4 17 0.3	6 20 0.3	8 23 0.3	7 16 0.4	5 15 0.4	4 12 0.3	4 8 0.4	-2% -12% 10%
	Vanuatu	$ mn Kg mn $/kg	n/a n/a n/a	n/a n/a n/a	3 1 6.0	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	6 1 9.2	5 0 10.8	4% -4% 9%
	Gambia, The	$ mn Kg mn $/kg	2 2 0.9	1 2 0.7	1 1 0.6	1 2 0.6	0 1 0.3	1 3 0.3	1 p.q. p.q.	0 p.q. p.q.	2 p.q. p.q.	0 0 1.1	14% 15% 2%
	St Vincent and the Grenadines	$ mn Kg mn $/kg	3.0 5.2 0.6	2.9 5.1 0.6	3.5 6.0 0.6	2.3 3.7 0.6	2.9 4.7 0.6	2.6 4.3 0.6	3.0 5.0 0.6	3.8 6.5 0.6	4.1 7.1 0.6	n/a n/a n/a	4% 4% 0%

Product group	Developing country exporter	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg. annual change [a]
Fixed vegetable fats and oils, crude, refined or fractionated, other than 'soft' *[includes palm oil]* (SITC 422)													
Main DC exporters	Indonesia	$ mn	1150	1673	1649	1341	2511	2875	4210	4762	5708	9439	26%
		Kg mn	2201	4250	5425	5885	7526	7413	10,015	12,174	13,898	13,953	23%
		$/kg	0.5	0.4	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.7	3%
	Malaysia	$ mn	4421	3784	2570	2502	3681	4984	5210	4754	5588	8856	8%
		Kg mn	6979	9363	8059	9588	9894	11,318	10,766	11,392	13,488	12,820	7%
		$/kg	0.6	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.7	1%
Most dependent DC exporters	Vanuatu	$ mn	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a	2	5	27%
		Kg mn	n/a	n/a	2	n/a	n/a	n/a	n/a	n/a	3	7	22%
		$/kg	n/a	n/a	0.5	n/a	n/a	n/a	n/a	n/a	0.7	0.7	4%
Cocoa (SITC 072)													
Main DC exporters	Côte d'Ivoire	$ mn	1646	1581	1030	1306	2267	2319	2133	1984	1951	2131	3%
		Kg mn	1049	1284	1285	1241	1236	1181	1308	1260	1177	1079	0%
		$/kg	1.6	1.2	0.8	1.1	1.8	2.0	1.6	1.6	1.7	2.0	3%
	Ghana	$ mn	516	454	307	314	n/a	838	1070	891	1239	1049	8%
		Kg mn	340	326	290	315	n/a	416	670	535	760	577	6%
		$/kg	1.5	1.4	1.1	1.0	n/a	2.0	1.6	1.7	1.6	1.8	2%
	Indonesia	$ mn	489	387	311	364	667	595	531	654	839	901	7%
		Kg mn	328	390	397	372	446	342	357	457	602	487	4%
		$/kg	1.5	1.0	0.8	1.0	1.5	1.7	1.5	1.4	1.4	1.8	2%
Most dependent DC exporters	São Tomé/Principe	$ mn	n/a	2	3	2	5	6	3	3	3	n/a	7%
		Kg mn	n/a	3	4	3	3	3	3	2	2	n/a	-5%
		$/kg	n/a	0.6	0.7	0.8	1.4	1.8	1.3	1.3	1.4	n/a	13%
Coffee and coffee substitutes (SITC 071)													
Main DC exporters	Brazil	$ mn	2605	2464	1784	1417	1385	1546	2058	2929	3364	3892	5%
		Kg mn	1040	1324	1022	1320	1620	1445	1494	1444	1557	1574	5%
		$/kg	2.5	1.9	1.7	1.1	0.9	1.1	1.4	2.0	2.2	2.5	0%
	Colombia	$ mn	2039	1455	1176	859	865	891	1055	1631	1634	1888	-1%
		Kg mn	651	582	529	574	594	593	590	634	620	654	0%
		$/kg	3.1	2.5	2.2	1.5	1.5	1.5	1.8	2.6	2.6	2.9	-1%
	Vietnam	$ mn	594	587	502	394	329	509	648	750	1230	n/a	10%
		Kg mn	n.q.	n.q.	n.q.	329	295	403	439	504	983	n/a	24%
		$/kg	n.q.	n.q.	n.q.	1.2	1.1	1.3	1.5	1.5	1.3	n/a	1%
Most dependent DC exporters	Ethiopia	$ mn	382	269	255	145	160	184	238	335	426	418	1%
		Kg mn	115	109	119	85	119	138	152	143	180	159	4%
		$/kg	3.3	2.5	2.1	1.7	1.3	1.3	1.6	2.3	2.4	2.6	-3%
	Rwanda	$ mn	4	30	n/a	15	14	14	33	37	48	32	26%
		Kg mn	13	18	n/a	18	20	14	22	18	26	15	2%
		$/kg	0.3	1.7	n/a	0.8	0.7	1.0	1.5	2.0	1.8	2.1	24%

	Burundi	$ mn	83	42	31	21	17	25	29	47	37	38	-8%
		Kg mn	42	24	22	19	18	n.q.	20	23	18	21	-7%
		$/kg	2.0	1.7	1.5	1.1	1.0	n.q.	1.5	2.0	2.0	1.8	-1%
	Uganda	$ mn	287	288	126	98	97	100	124	173	190	266	-1%
		Kg mn	163	2	152	183	202	146	160	144	123	165	0%
		$/kg	1.8	179.2	0.8	0.5	0.5	0.7	0.8	1.2	1.5	1.6	-1%
	Honduras	$ mn	430	256	175	147	183	183	257	330	390	500	2%
		Kg mn	140	119	345	233	164	150	177	145	172	207	4%
		$/kg	3.1	2.1	0.5	0.6	1.1	1.2	1.5	2.3	2.3	2.4	-3%
	Nicaragua	$ mn	167	141	178	107	77	93	136	137	203	206	2%
		Kg mn	64	59	85	81	60	62	83	60	85	78	2%
		$/kg	2.6	2.4	2.1	1.3	1.3	1.5	1.6	2.3	2.4	2.6	0%
Natural rubber, balata, gutta-percha, guayule, chicle and similar natural gums, in primary forms (including latex) or in plates, sheets or strip (SITC 231)													
Main DC exporters	Thailand	$ mn	1343	1159	1509	1321	1738	2797	3415	3695	5430	5641	17%
		Kg mn	1998	2031	2540	2550	2785	3108	3022	2952	3057	2966	4%
		$/kg	0.7	0.6	0.6	0.5	0.6	0.9	1.1	1.3	1.8	1.9	12%
	Indonesia	$ mn	1106	850	889	787	1038	1495	2181	2584	4322	4871	18%
		Kg mn	1642	1495	1380	1454	1496	1662	1875	2025	2287	2408	4%
		$/kg	0.7	0.6	0.6	0.5	0.7	0.9	1.2	1.3	1.9	2.0	13%
Most dependent DC exporters	Côte d'Ivoire	$ mn	75	68	78	70	86	123	164	200	315	360	19%
		Kg mn	109	118	124	130	126	132	140	158	175	185	6%
		$/kg	0.7	0.6	0.6	0.5	0.7	0.9	1.2	1.3	1.8	1.9	12%
Fruit and nuts (not including oil nuts), fresh or dried (SITC 057)													
Main DC exporters	Chile	$ mn	1066	1110	1192	1221	1325	1598	1671	1837	2103	2404	9%
		Kg mn	1552	1547	1515	1767	n.q.	n.q.	2227	2210	2364	2465	5%
		$/kg	0.7	0.7	0.8	0.7	n.q.	n.q.	0.8	0.8	0.9	1.0	4%
	Mexico	$ mn	749	747	742	732	727	992	1175	1403	1518	1944	11%
		Kg mn	1521	1580	1843	1385	1411	1549	1657	1884	2051	2187	4%
		$/kg	0.5	0.5	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.9	7%
Most dependent DC exporters	St Lucia	$ mn	39	33	22	22	22	17	20	16	18	n/a	-9%
		Kg mn	77	67	51	21	49	35	43	31	36	n/a	-9%
		$/kg	0.5	0.5	0.4	1.0	0.5	0.5	0.5	0.5	0.5	n/a	0%
	St Vincent	$ mn	22	21	20	18	17	13	15	13	12	n/a	-7%
		Kg mn	43	42	47	40	41	30	32	29	25	n/a	-6%
		$/kg	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	n/a	-1%
	Panama	$ mn	165	202	165	149	152	158	191	236	314	358	9%
		Kg mn	520	632	525	522	517	469	39	553	772	843	6%
		$/kg	0.3	0.3	0.3	0.3	0.3	0.3	4.9	0.4	0.4	0.4	3%
	Dominica	$ mn	n/a	19	16	12	12	10	11	10	11	9	-9%
		Kg mn	n/a	33	33	23	22	16	18	16	16	12	-12%
		$/kg	n/a	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	4%
	Belize	$ mn	21	0	28	13	17	36	39	37	43	35	6%
		Kg mn	64	0	75	52	46	223	115	104	117	97	5%
		$/kg	0.3	0.3	0.4	0.3	0.4	0.2	0.3	0.4	0.4	0.4	1%
	Costa Rica	$ mn	876	853	754	723	708	843	902	914	1187	1277	4%
		Kg mn	2787	2735	1622	2584	2482	2879	3010	2994	3683	3925	4%
		$/kg	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0%

Product group	Developing country exporter	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg. annual change [a]
	Honduras	$ mn Kg mn $/kg	297 721 0.4	114 307 0.4	274 188 1.5	363 192 1.9	149 666 0.2	168 718 0.2	202 834 0.2	194 808 0.2	190 802 0.2	214 865 0.2	-4% 2% -6%
	Ecuador	$ mn Kg mn $/kg	1081 4,023 0.3	967 4,105 0.2	835 4,159 0.2	867 3,738 0.2	999 4,449 0.2	1141 4,871 0.2	1070 4,834 0.2	1137 4,995 0.2	1280 5,132 0.2	1363 5,449 0.3	3% 3% -1%
Sugars, molasses and honey (SITC 061)													
Main DC exporters	Brazil	$ mn Kg mn $/kg	1953 8421 0.2	1925 12,198 0.2	1204 6533 0.2	2289 11,225 0.2	2134 13,510 0.2	2204 13,089 0.2	2698 15,877 0.2	3952 18,255 0.2	6207 18,948 0.3	5134 19,397 0.3	11% 10% 1%
	Thailand	$ mn Kg mn $/kg	689 2943 0.2	582 3906 0.1	683 5137 0.1	765 4701 0.2	763 5423 0.1	992 6494 0.2	872 6147 0.1	798 4279 0.2	802 2793 0.3	1331 5010 0.3	8% 6% 1%
Most dependent DC exporters	Fiji	$ mn Kg mn $/kg	n/a n/a n/a	n/a n/a n/a	97 305 0.3	119 414 0.3	114 383 0.3	125 320 0.4	107 331 0.3	135 386 0.3	120 346 0.3	120 274 0.4	3% -2% 5%
	Guyana	$ mn Kg mn $/kg	122 240 0.5	144 333 0.4	123 330 0.4	90 284 0.3	93 353 0.3	128 358 0.4	116 371 0.3	156 253 0.6	140 403 0.3	154 278 0.6	3% 2% 1%
	Belize	$ mn Kg mn $/kg	46 109 0.4	1 7 0.1	37 110 0.3	31 98 0.3	32 103 0.3	37 302 0.1	42 147 0.3	36 122 0.3	52 132 0.4	47 127 0.4	0% 2% -1%
	Mauritius	$ mn Kg mn $/kg	372 735 0.5	318 569 0.6	212 502 0.4	283 754 0.4	287 n.q. n.q.	305 564 0.5	362 705 0.5	350 967 0.4	356 611 0.6	300 500 0.6	-2% -4% 2%
	Swaziland	$ mn Kg mn $/kg	n/a n/a n/a	n/a n/a n/a	107 908 0.1	77 364 0.2	59 262 0.2	123 321 0.4	188 974 0.2	175 331 0.5	309 672 0.5	176 908 0.2	7% 0% 7%
Rice (SITC 042)													
Main DC exporters	Thailand	$ mn Kg mn $/kg	2102 6537 0.3	1947 6839 0.3	1630 6148 0.3	1577 7665 0.2	1631 7327 0.2	1830 7344 0.2	2691 9982 0.3	2322 7542 0.3	2579 7434 0.3	3470 9198 0.4	6% 4% 2%
	India	$ mn Kg mn $/kg	1492 4964 0.3	721 1896 0.4	654 1534 0.4	673 2209 0.3	1213 5057 0.2	896 3412 0.3	1478 4797 0.3	1411 4088 0.3	1552 4748 0.3	2353 6241 0.4	5% 3% 3%
	Vietnam	$ mn Kg mn $/kg	1020 n.q. n.q.	1025 n.q. n.q.	668 n.q. n.q.	624 1805 0.3	726 1915 0.4	720 1885 0.4	950 2074 0.5	1408 3040 0.5	1276 4643 0.3	n/a n/a n/a	3% 21% -4%
	Pakistan	$ mn Kg mn $/kg	572 1969 0.3	584 1919 0.3	534 2016 0.3	521 2424 0.2	463 1603 0.3	627 1958 0.3	683 1959 0.3	1099 3475 0.3	1152 3546 0.3	1145 2702 0.4	8% 4% 4%

Most dependent DC exporters	Guyana	$ mn Kg mn $/kg	69 250 0.3	58 252 0.2	41 208 0.2	44 367 0.1	41 174 0.2	36 163 0.2	49 256 0.2	46 231 0.2	50 179 0.3	75 179 0.4	1% -4% 5%
	St Vincent	$ mn Kg mn $/kg	6 9 0.7	5 7 0.7	5 7 0.6	4 7 0.6	4 7 0.6	3 4 0.7	3 5 0.6	3 4 0.7	4 6 0.6	n/a n/a n/a	-6% -5% -1%
	Uruguay	$ mn Kg mn $/kg	273 687 0.4	196 741 0.3	165 743 0.2	168 819 0.2	140 678 0.2	187 674 0.3	180 640 0.3	200 723 0.3	219 746 0.3	281 801 0.4	0% 2% -1%
Crude vegetable materials not elsewhere specified *[includes flowers]* (SITC 292)													
Main DC exporters	Colombia	$ mn Kg mn $/kg	562 148 3.8	556 149 3.7	587 172 3.4	615 183 3.4	675 190 3.6	687 199 3.4	710 193 3.7	917 225 4.1	980 227 4.3	1129 237 4.8	8% 5% 3%
	China	$ mn Kg mn $/kg	484 359 1.3	454 388 1.2	459 p.q. p.q.	463 p.q. p.q.	503 p.q. p.q.	525 p.q. p.q.	601 p.q. p.q.	692 p.q. p.q.	819 p.q. p.q.	1010 p.q. p.q.	9% 8% -13%
	India	$ mn Kg mn $/kg	408 191 2.1	394 206 1.9	378 242 1.6	353 224 1.6	378 230 1.6	386 247 1.6	458 251 1.8	589 322 1.8	667 329 2.0	704 354 2.0	6% 7% -1%
Most dependent DC exporters	Ethiopia	$ mn Kg mn $/kg	53 8 6.5	68 16 4.3	73 17 4.4	57 12 4.8	46 10 4.7	117 19 6.1	39 13 2.9	106 p.q. p.q.	129 p.q. p.q.	203 p.q. p.q.	16% 9% -13%
	Kenya	$ mn Kg mn $/kg	107 43 2.5	110 44 2.5	118 42 2.8	174 59 2.9	132 142 0.9	241 931 0.3	289 107 2.7	306 p.q. p.q.	383 p.q. p.q.	452 p.q. p.q.	17% 16% 1%
	Zimbabwe	$ mn Kg mn $/kg	n/a n/a n/a	44 n.q. n.q.	32 15 2.1	2 n.q. n.q.	70 n.q. n.q.	n/a n/a n/a	25 13 1.9	38 14 2.7	767 184 4.2	203 p.q. n.q.	21% 52% 12%
	Kiribati	$ mn Kg mn $/kg	0 0 621.8	1 1 0.7	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0.5	n/a n/a n/a	n/a n/a n/a	-25% 112% -64%
Copper (SITC 682)													
Main DC exporters	Chile	$ mn Kg mn $/kg	4163 2486 1.7	4250 2731 1.6	5064 2776 1.8	4816 2963 1.6	4649 n.q. n.q.	5001 n.q. n.q.	9522 3358 2.8	11,590 3175 3.7	20,413 3070 6.6	23,930 3407 7.0	21% 4% 17%
	China	$ mn Kg mn $/kg	512 216 2.4	508 205 2.5	723 263 2.7	515 178 2.9	627 253 2.5	809 300 2.7	1842 516 3.6	2624 608 4.3	5191 806 6.4	4747 625 7.6	28% 13% 14%
Most dependent DC exporters	Zambia	$ mn Kg mn $/kg	647 289 2.2	445 291 1.5	472 255 1.9	504 298 1.7	491 268 1.8	486 304 1.6	680 372 1.8	1004 399 2.5	2610 392 6.7	3283 482 6.8	20% 6% 13%
	Peru	$ mn Kg mn $/kg	752 451 1.7	726 464 1.6	866 472 1.8	801 498 1.6	829 529 1.6	911 521 1.7	1473 517 2.8	2130 567 3.8	3540 513 6.9	2947 409 7.2	16% -1% 18%

Product group	Developing country exporter	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg. annual change [a]
Gold, non-monetary (excluding gold ores and concentrates) (SITC 971)													
Main DC exporters	Hong Kong, China	$ mn	257	391	313	588	1542	3967	3806	2560	5446	4122	36%
		Kg 000	27	42	35	67	185	391	328	220	345	227	27%
		$/kg	9489.1	9257.1	8996.0	8797.3	8316.4	10,141.6	11,586.7	11,615.5	15,767.9	18,156.7	7%
	Peru	$ mn	954	1192	1144	1166	1467	2021	2361	3072	4003	4178	18%
		Kg 000	129	296	314	463	341	353	394	511	477	479	16%
		$/kg	7377.5	4033.1	3641.5	2518.0	4308.9	5721.8	5998.4	6013.9	8389.5	8715.6	2%
	Ghana	$ mn	120	101	613	616	n/a	830	125	864	1131	1459	32%
		Kg 000	106	79	80	82	n/a	71	31	72	73	76	-4%
		$/kg	1136.9	1272.2	7683.1	7550.8	n/a	11,708.3	4012.4	12,043.4	15,574.8	19,071.6	37%
Most dependent DC exporters	Mali	$ mn	186	230	272	482	608	566	505	693	1132	1082	22%
		Kg 000	684	29	521	58	71	54	41	49	62	55	-24%
		$/kg	272.5	7836.8	522.0	8361.2	8549.5	10,439.4	12,297.6	14,046.3	18,190.1	19,696.6	61%
	Burundi	$ mn	-	18	2	6	3	33	43	55	86	53	15%
		Kg 000	-	40	0	1	0	n.q.	3	4	5	7	57%
		$/kg		438.8	8660.1	8911.6	9114.1	n.q.	13,148.0	14,064.1	18,727.9	8003.0	-1%
	Tanzania	$ mn	39	3	114	206	268	444	526	551	611	554	34%
		Kg 000	37	3	14	30	35	67	50	47	58	46	3%
		$/kg	1068.3	980.1	7945.8	6922.7	7741.6	6631.4	10,495.7	11,849.9	10,558.9	11,981.8	31%
	Guinea	$ mn	76	80	96	119	130	n/a	n/a	n/a	n/a	n/a	14%
		Kg 000	72	12	937	80	101	n/a	n/a	n/a	n/a	n/a	9%
		$/kg	1057.1	6544.8	102.8	1486.7	1291.2	n/a	n/a	n/a	n/a	n/a	5%
	Papua New Guinea	$ mn	23	n/a	-	392	279	144	881	n/a	n/a	n/a	84%
		Kg 000	5	n/a	-	46	17	1	p.q.	n/a	n/a	n/a	-31%
		$/kg	4376.9	n/a		8509.2	16,763.7	180,367.1	p.q.	n/a	n/a	n/a	110%
	Mongolia	$ mn	7	3	6	1	76	140	230	331	270	235	49%
		Kg 000	1	0	1	0	n.q.	n.q.	18	24	15	12	35%
		$/kg	8399.2	8021.2	7469.8	6552.9	n.q.	n.q.	12,523.0	13,917.8	17,575.8	20,289.7	10%
	Guyana	$ mn	127	109	138	101	105	93	100	81	80	158	2%
		Kg 000	14	12	16	297	400	209	33	9	5	176	33%
		$/kg	9360.4	8911.9	8550.7	341.2	261.9	444.2	3035.4	8543.2	14,725.4	897.9	-23%
	Niger	$ mn	n/a	n/a	n/a	n/a	n/a	n/a	21	70	37	59	41%
		Kg 000	n/a	n/a	n/a	n/a	n/a	n/a	2	5	3	3	20%
		$/kg	n/a	n/a	n/a	n/a	n/a	n/a	13,917.7	14,287.9	14,288.1	22,749.9	18%
	Lebanon	$ mn	18	40	48	59	129	355	181	120	n/a	315	37%
		Kg 000	3	6	7	8	15	37	16	10	n/a	16	22%
		$/kg	6887.0	7312.9	7182.7	7275.4	8352.8	9490.7	11,249.3	11,873.1	n/a	19,129.4	12%
Cotton (SITC 263)													
Main DC exporters	India	$ mn	50	18	53	11	11	206	85	664	1352	1663	48%
		Kg mn	44	18	40	12	13	192	81	631	1175	1267	45%
		$/kg	1.1	1.0	1.3	0.9	0.8	1.1	1.0	1.1	1.2	1.3	2%
	Brazil	$ mn	5	6	36	164	98	195	412	458	352	512	66%
		Kg mn	6	11	42	171	121	197	348	410	342	436	62%
		$/kg	1.0	0.6	0.9	1.0	0.8	1.0	1.2	1.1	1.0	1.2	2%

Most dependent DC exporters	Burkina	$ mn	162	156	106	104	105	221	281	n/a	n/a	n/a	10%
		Kg mn	117	114	118	11	14	195	193	n/a	n/a	n/a	9%
		$/kg	1.4	1.4	0.9	9.4	7.5	1.1	1.5	n/a	n/a	n/a	1%
	Benin	$ mn	156	169	128	119	128	178	203	167	n/a	n/a	1%
		Kg mn	115	164	136	108	148	159	129	163	n/a	n/a	5%
		$/kg	1.4	1.0	0.9	1.1	0.9	1.1	1.6	1.0	n/a	n/a	-4%
	Mali	$ mn	215	210	162	98	153	350	354	263	254	199	-1%
		Kg mn	215	195	165	101	171	180	237	260	229	152	-4%
		$/kg	1.0	1.1	1.0	1.0	0.9	1.9	1.5	1.0	1.1	1.3	3%
	Togo	$ mn	91	82	42	22	40	70	60	30	n/a	25	-13%
		Kg mn	67	70	30	25	44	63	44	28	n/a	23	-11%
		$/kg	1.4	1.2	1.4	0.9	0.9	1.1	1.4	1.1	n/a	1.1	-2%

Key: 'n/a' denotes that the country has not reported its trade to Comtrade in the year in question. 'n.q.' denotes that no trade quantities are given in Comtrade in the year in question. 'p.q' denotes that quantities are given for only a proportion (usually very small) of the total value of exports in the year in question.
Notes: a) From the earliest to the latest years for which data are available for the country/indicator in question. b) The quantity unit differs in different years: kg mn in 1998-1999 and 2007, items mn in 2000-2006.
Source: UN Comtrade database (downloaded February 2009).

Annex 2: Multiple commodity dependencies: Which countries are hit most?

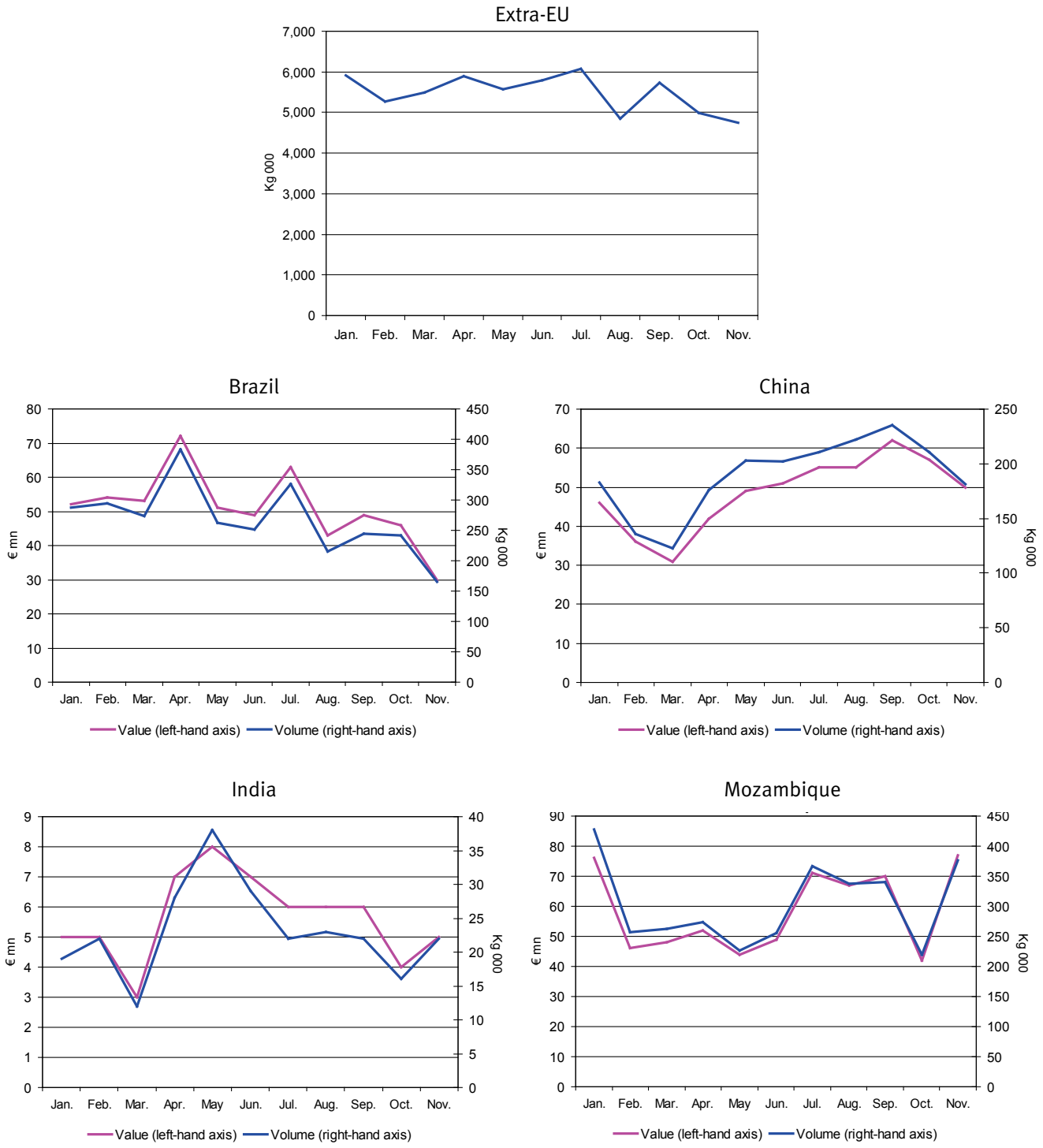
Product	Main developing country exporters *(top 3)*	Dependency of main exporters *(% of country's total export revenue in 3 latest reported years)*	Most dependent developing country exporters *(top 3, or all for which product accounted for >20% of total export revenue in 3 latest reported years)*	Dependency of most dependent exporters *(% of country's total export revenue in 3 latest reported years)*
Aluminium	China Brazil South Africa	0.6% 1.8% 3.6%	Mozambique Bahrain Cameroon	60.2% 11.3% 4.7%
Copper	Chile China Peru	also most dependent 0.4% also most dependent	Zambia Chile Peru	67.6% 34.9% 12.5%
Gold	Hong Kong Peru Ghana	19.9% 16.4% also most dependent	Mali Burundi Tanzania Ghana Guinea	71.9% 47.8% 32.9% 31.8% 21.3%
Crude oil	Saudi Arabia Venezuela Iran	also most dependent also most dependent also most dependent	Iraq Nigeria Venezuela Yemen Gabon Iran, Islamic Rep. Saudi Arabia Oman Brunei Kuwait Algeria Ecuador Qatar UAE Cameroon Syria Vietnam Papua New Guinea	96.5% 93.0% 87.9% 85.8% 81.8% 79.1% 78.0% 71.4% 59.6% 58.9% 55.2% 54.3% 47.8% 45.7% 42.9% 39.8% 21.6% 20.3%
Natural rubber	Thailand Indonesia Malaysia	also most dependent also most dependent 1.2%	Indonesia Thailand Côte d'Ivoire	3.9% 3.7% 3.7%
Cocoa	Côte d'Ivoire Ghana Indonesia	also most dependent also most dependent	São Tomé/Príncipe Ghana Côte d'Ivoire	88.7% 29.3% 25.9%
Coffee	Brazil Colombia Vietnam	2.4% 6.8% 2.7%	East Timor *Sierra Leone* Ethiopia Rwanda Burundi Uganda Honduras	96.4% *86.5%*[a] 36.7% 30.4% 30.1% 22.8% 22.1%
Cotton	India Brazil Burkina Faso	1.0% 0.3% also most dependent	Burkina Faso Benin Mali	68.7% 68.6% 17.7%
Palm oil	Indonesia Malaysia Philippines	also most dependent 4.0% 1.4%	Vanuatu Indonesia Papua New Guinea	8.4% 6.6% 5.9%
Rice	Thailand India Vietnam	2.1% 1.4% 3.7%	Guyana St Vincent Pakistan	9.3% 9.2% 6.8%
Sugar	Brazil Thailand India	3.7% 0.7% 0.5%	Fiji Guyana Belize	25.4% 24.4% 18.6%
Vegetables	Mexico China Thailand	1.4% 0.3% 0.5%	Tonga Vanuatu Gambia	46.6% 16.0% 11.9%
Fruit and nuts	Chile Mexico South Africa	4.0% 0.7% 2.4%	St Lucia St Vincent Panama Dominica	39.7% 38.2% 29.2% 26.4%

Product	Main developing country exporters *(top 3)*	Dependency of main exporters *(% of country's total export revenue in 3 latest reported years)*	Most dependent developing country exporters *(top 3, or all for which product accounted for >20% of total export revenue in 3 latest reported years)*	Dependency of most dependent exporters *(% of country's total export revenue in 3 latest reported years)*
Flowers	Colombia China India	4.0% 0.1% 0.5%	Kenya Zimbabwe Kiribati	10.4% 9.2% 6.9%
Computer equipment	China Malaysia Thailand	also most dependent also most dependent 8.1%	Malaysia China Philippines	9.7% 9.5% 9.1%
Female clothing, woven	China India Indonesia	1.9% 2.5% 1.4%	Sri Lanka Bangladesh Nepal	15.8% 11.0% 9.9%

Note: According to figures reported by Sierra Leone for 2002 (the only year for which data are available). This proportion seems somewhat implausible given that Sierra Leone is a major exporter of diamonds (which were not included among its reported exports in 2002), and should perhaps be treated with caution.

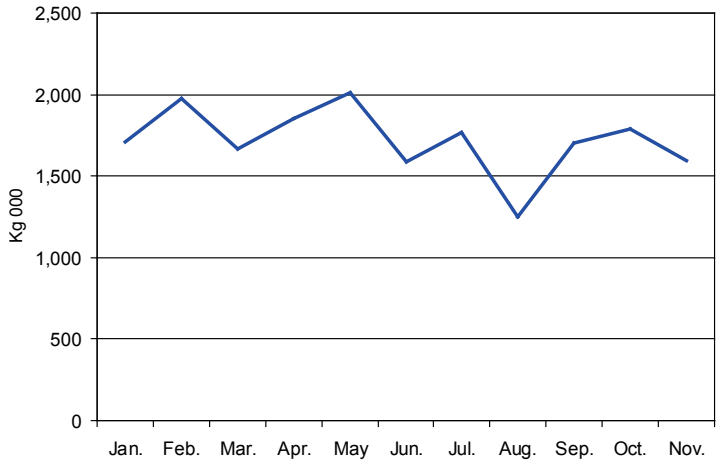
Annex 3a: EU imports by month, 2008

Figure 3a.1: Aluminium – EU27 imports from extra-EU and selected developing countries, 2008



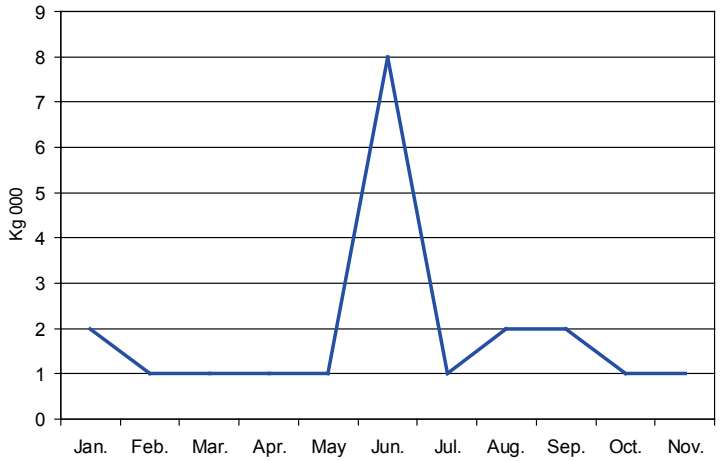
Source: Eurostat COMEXT database (March 2009).

Figure 3a.2: Copper – EU27 imports from extra-EU, 2008



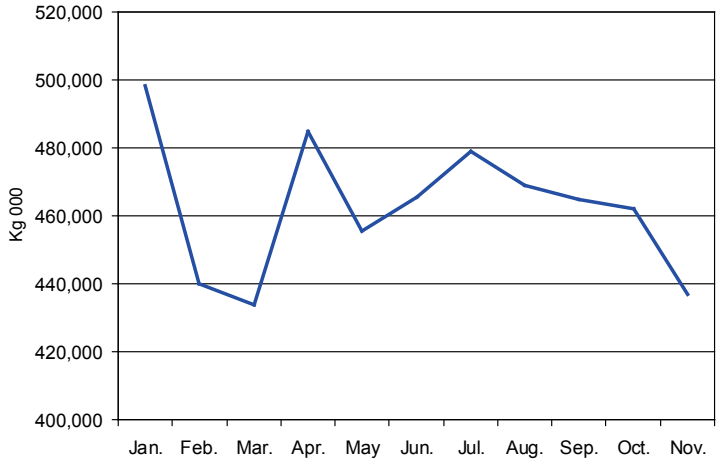
Source: Eurostat COMEXT database (March 2009).

Figure 3a.3: Gold – EU27 imports from extra-EU, 2008



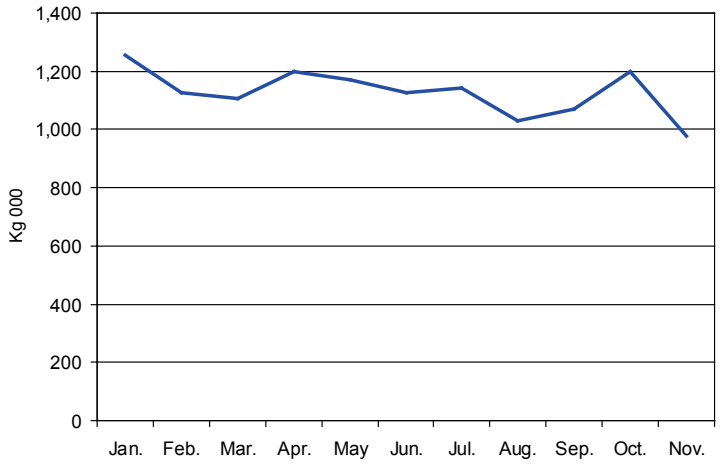
Source: Eurostat COMEXT database (March 2009).

Figure 3a.4: Crude oil – EU27 imports from extra-EU, 2008



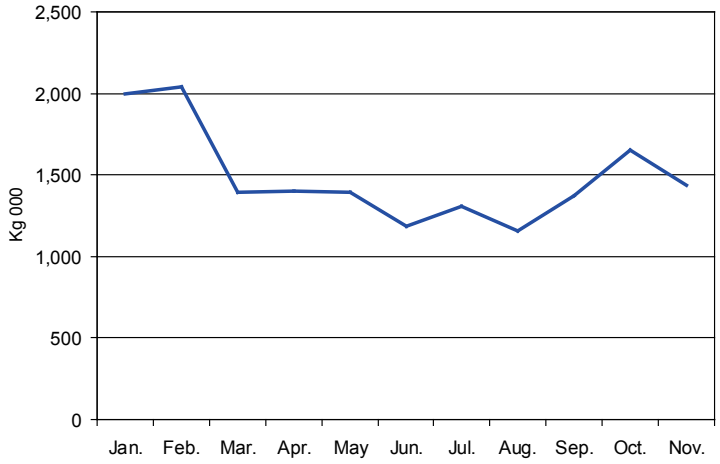
Source: Eurostat COMEXT database (March 2009).

Figure 3a.5: Natural rubber – EU27 imports from extra-EU, 2008



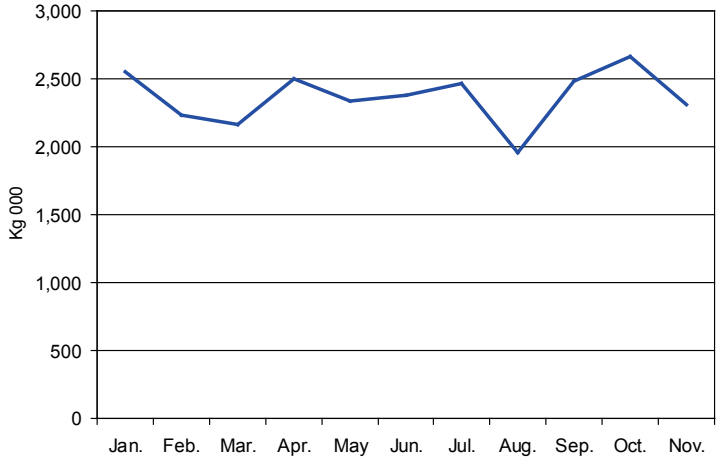
Source: Eurostat COMEXT database (March 2009).

Figure 3a.6: Cocoa – EU27 imports from extra-EU, 2008



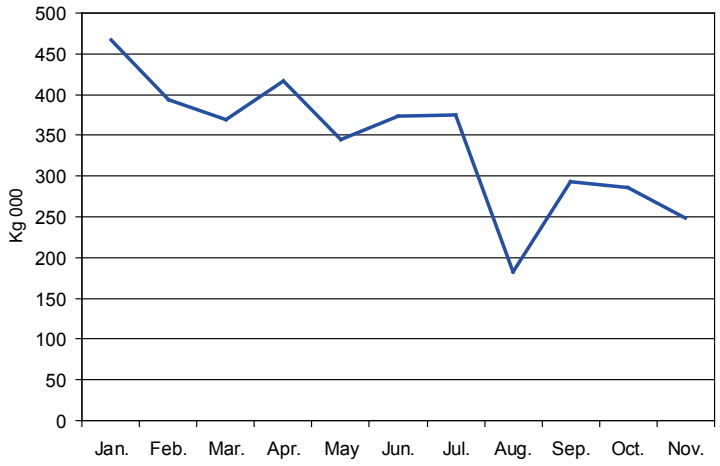
Source: Eurostat COMEXT database (March 2009).

Figure 3a.7: Coffee – EU27 imports from extra-EU, 2008



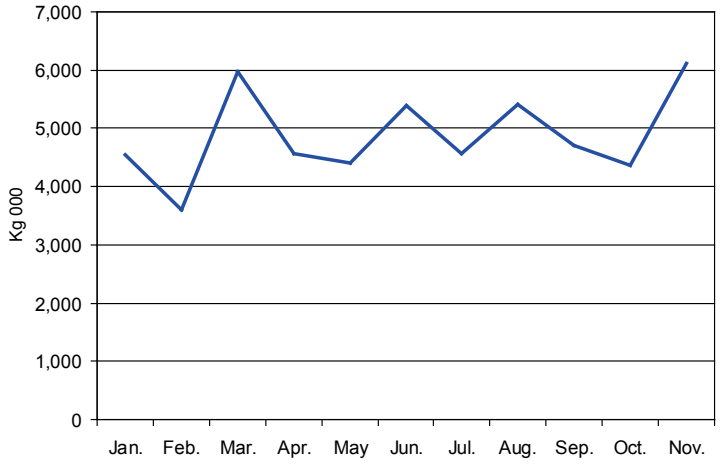
Source: Eurostat COMEXT database (March 2009).

Figure 3a.8: Cotton – EU27 imports from extra-EU, 2008



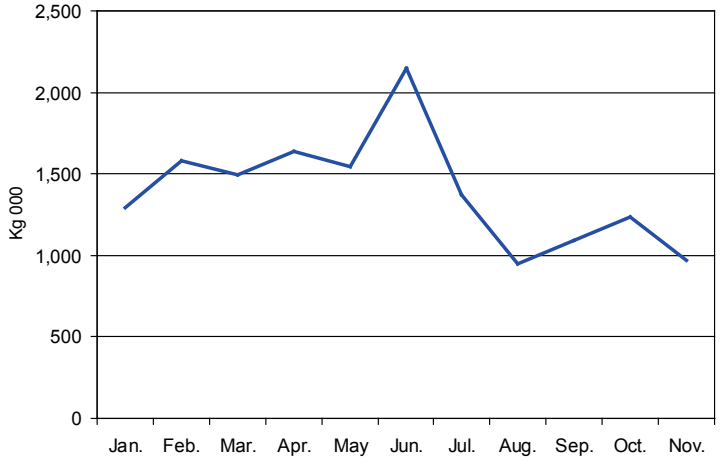
Source: Eurostat COMEXT database (March 2009).

Figure 3a.9: Palm oil – EU27 imports from extra-EU, 2008



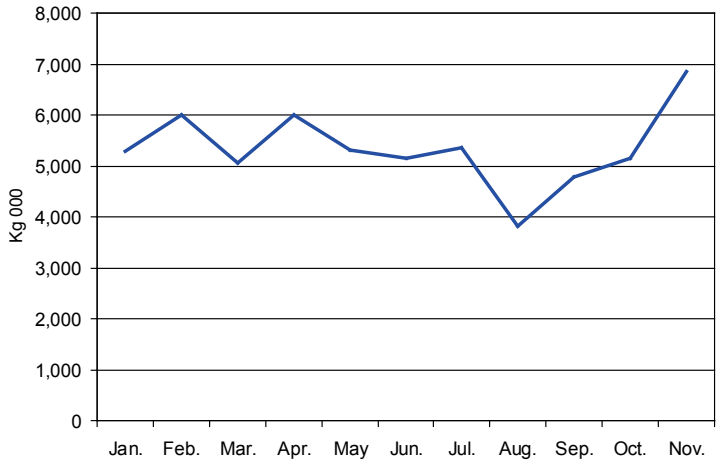
Source: Eurostat COMEXT database (data downloaded March 2009).

Figure 3a.10: Rice – EU27 imports from extra-EU, 2008



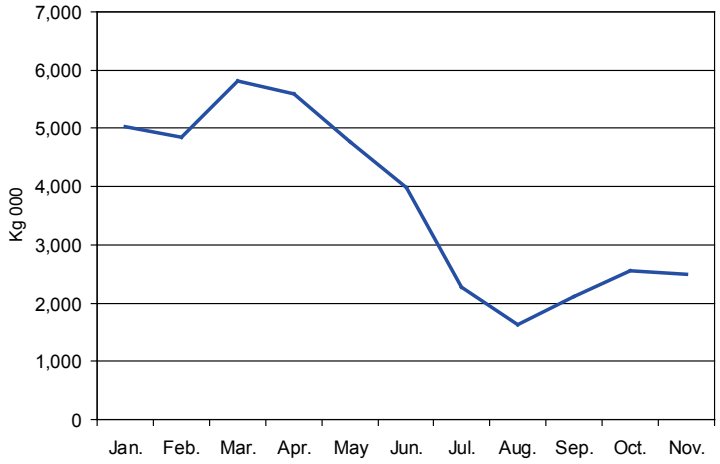
Source: Eurostat COMEXT database (March 2009).

Figure 3a.11: Sugar, molasses and honey – EU27 imports from extra-EU, 2008



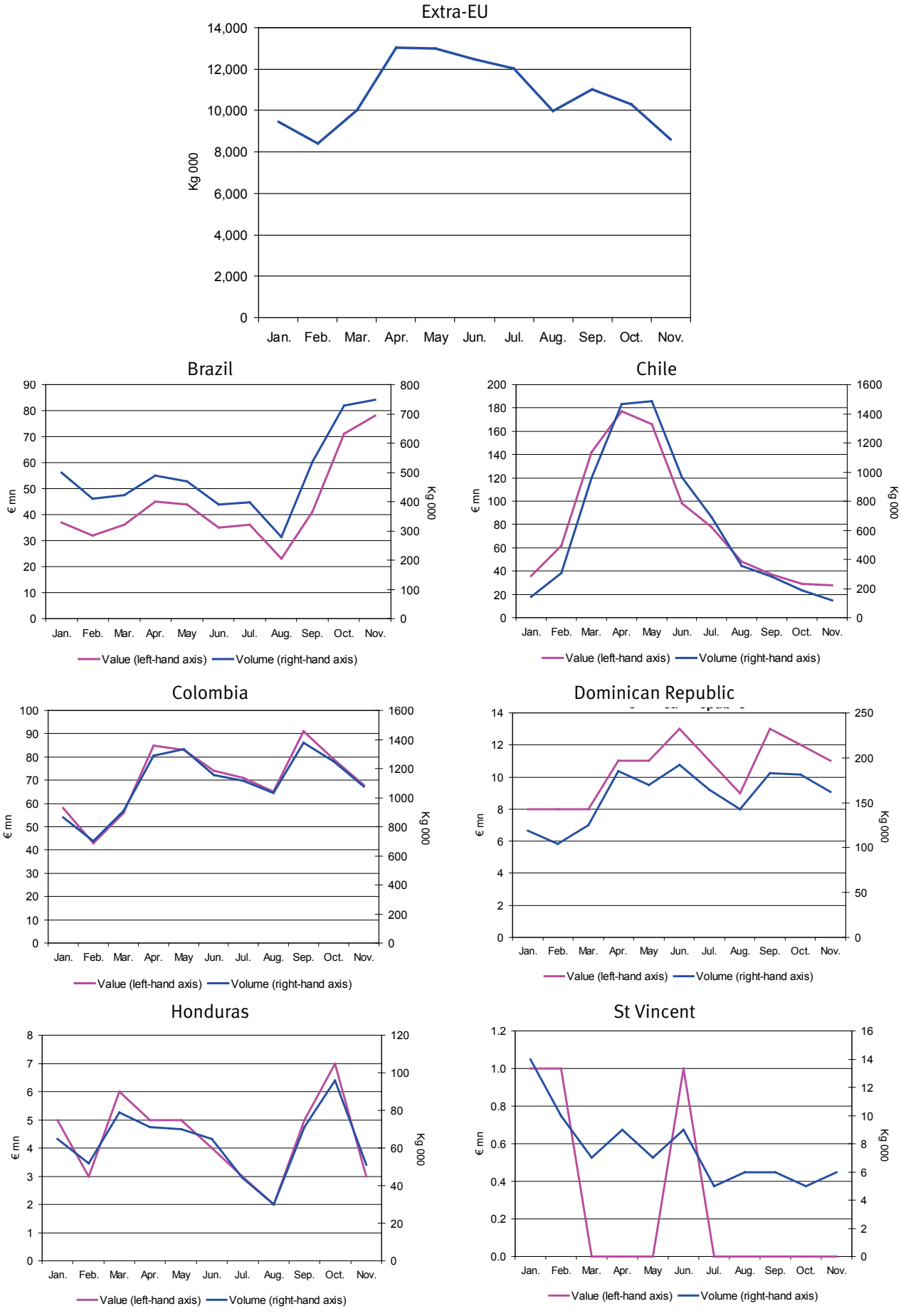
Source: Eurostat COMEXT database (March 2009).

Figure 3a.12: Vegetables – EU27 imports from extra-EU, 2008



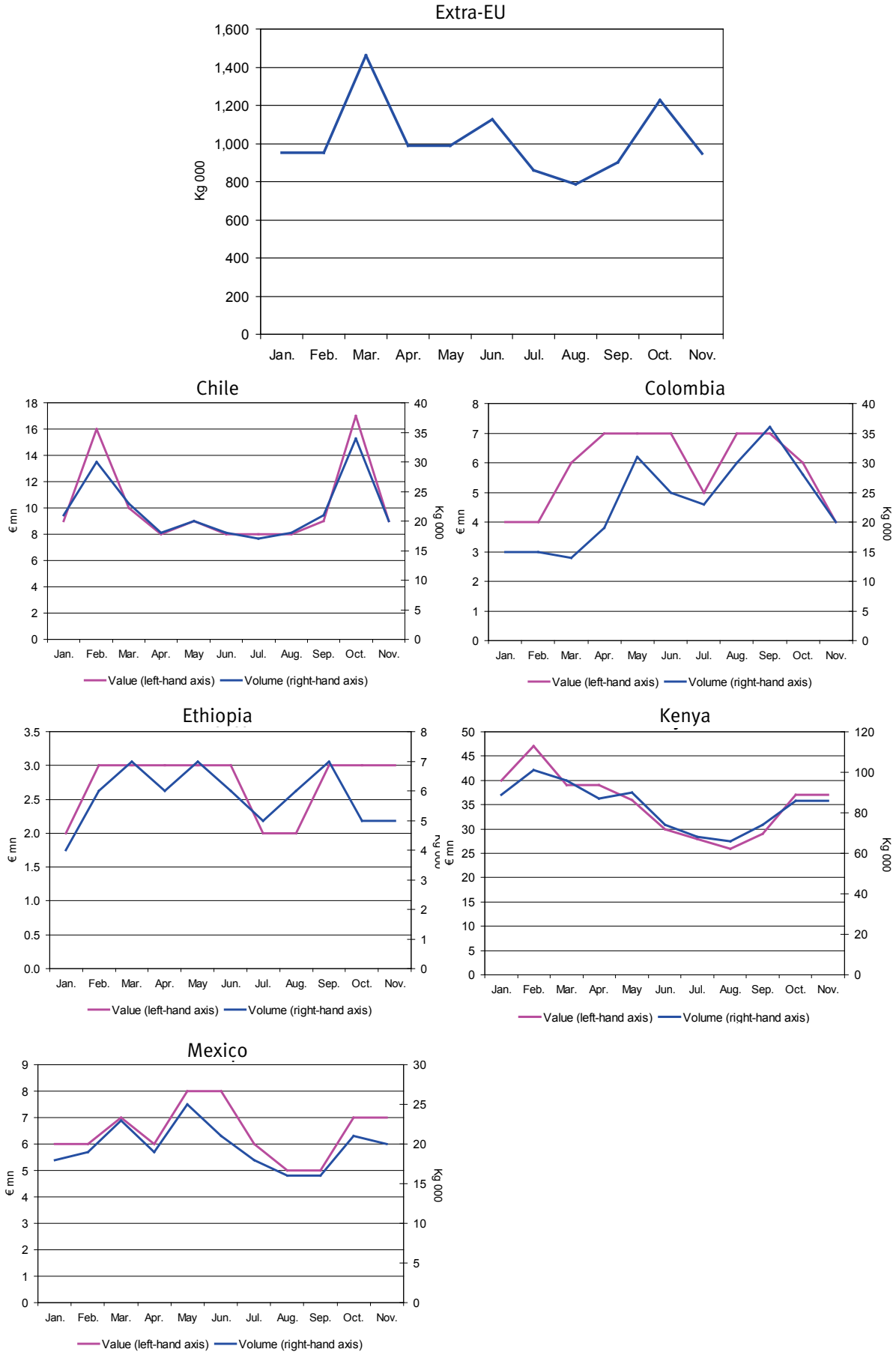
Source: Eurostat COMEXT database (March 2009).

Figure 3a.13: Fruit and nuts – EU27 imports from extra-EU and selected developing countries, 2008



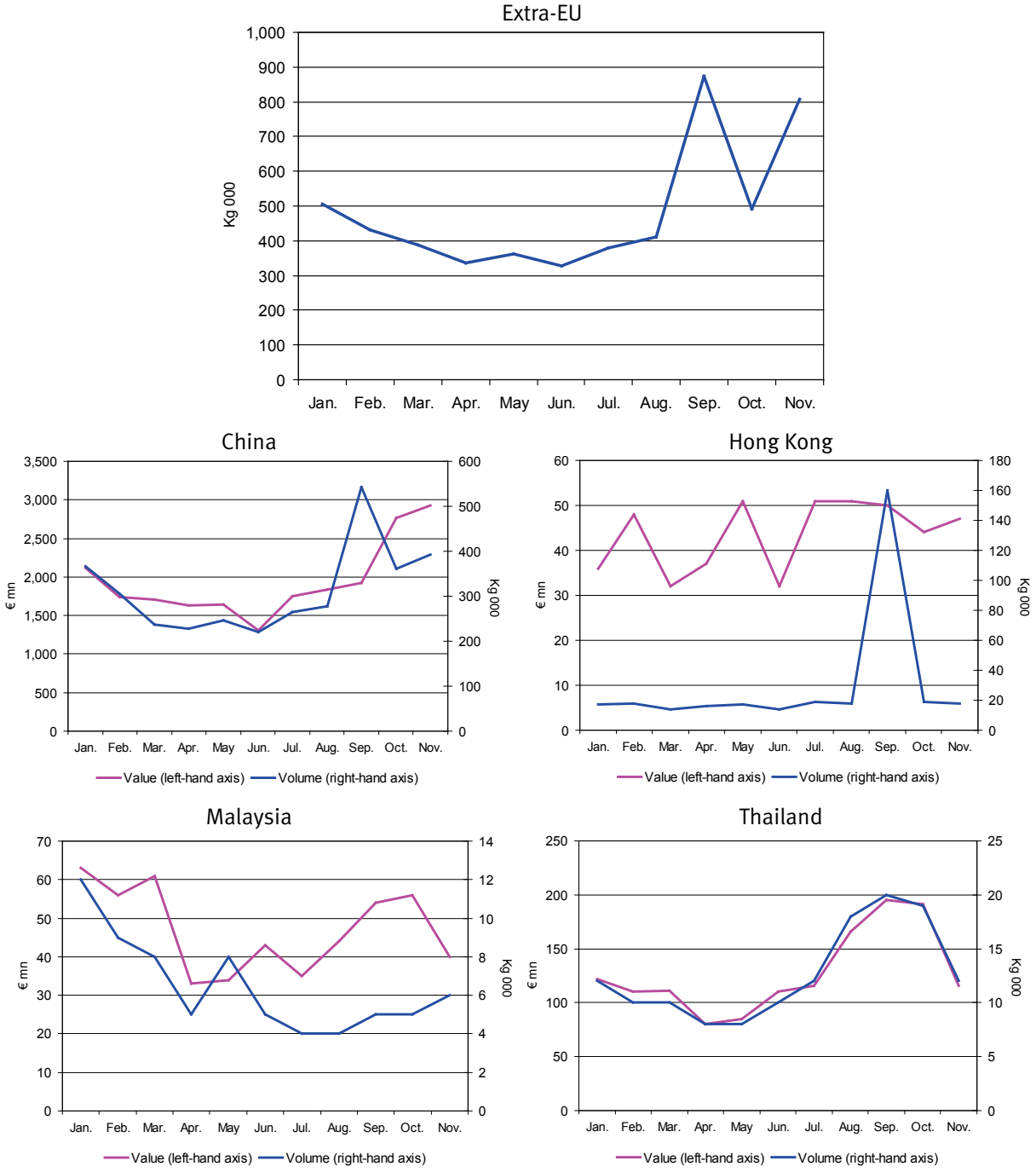
Source: Eurostat COMEXT database (March 2009).

Figure 3a.14: Flowers – EU27 imports from extra-EU and selected developing countries, 2008



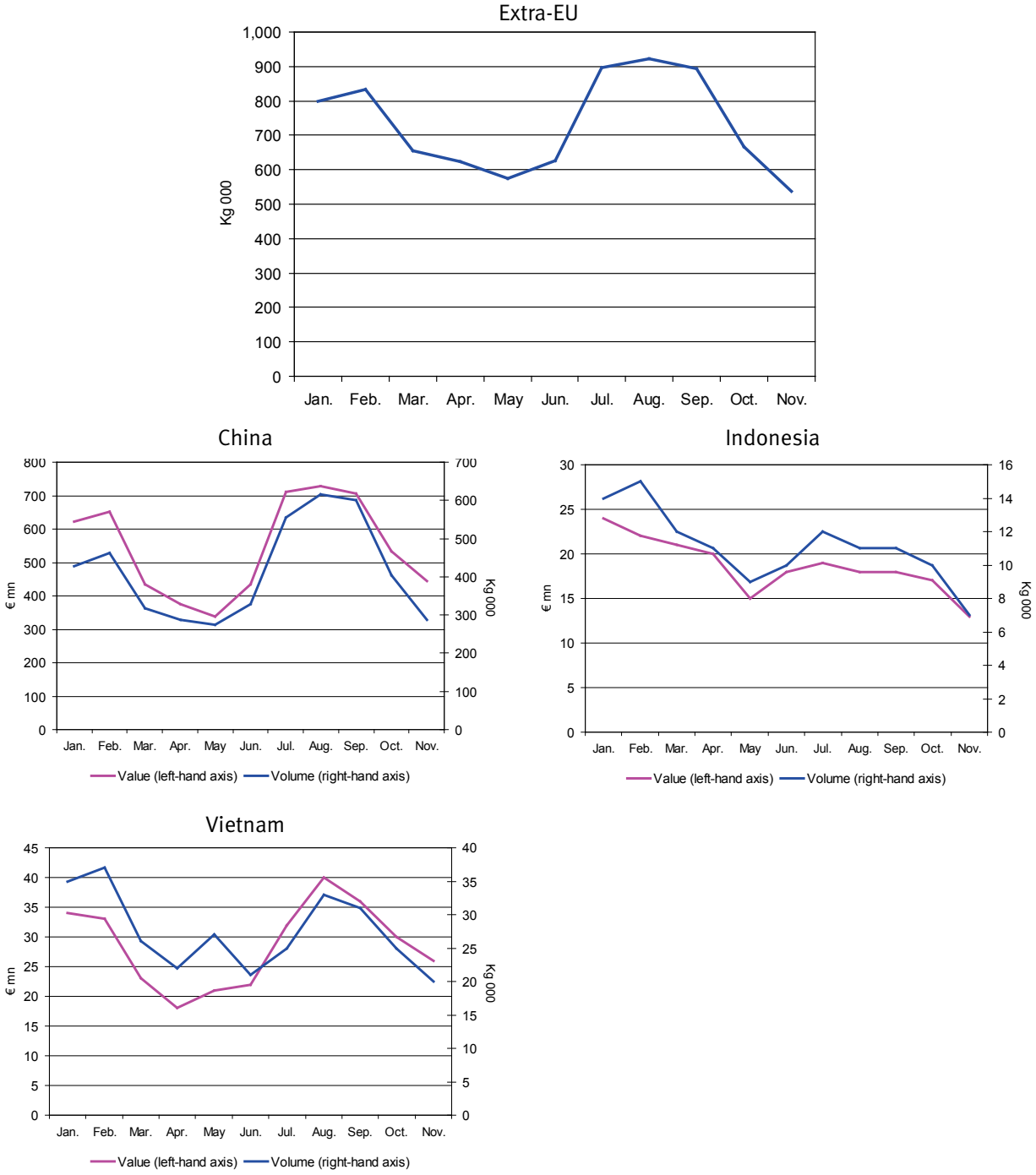
Source: Eurostat COMEXT database (March 2009).

Figure 3a.15: Computer equipment – EU27 imports from extra-EU and selected developing countries, 2008



Source: Eurostat COMEXT database (March 2009).

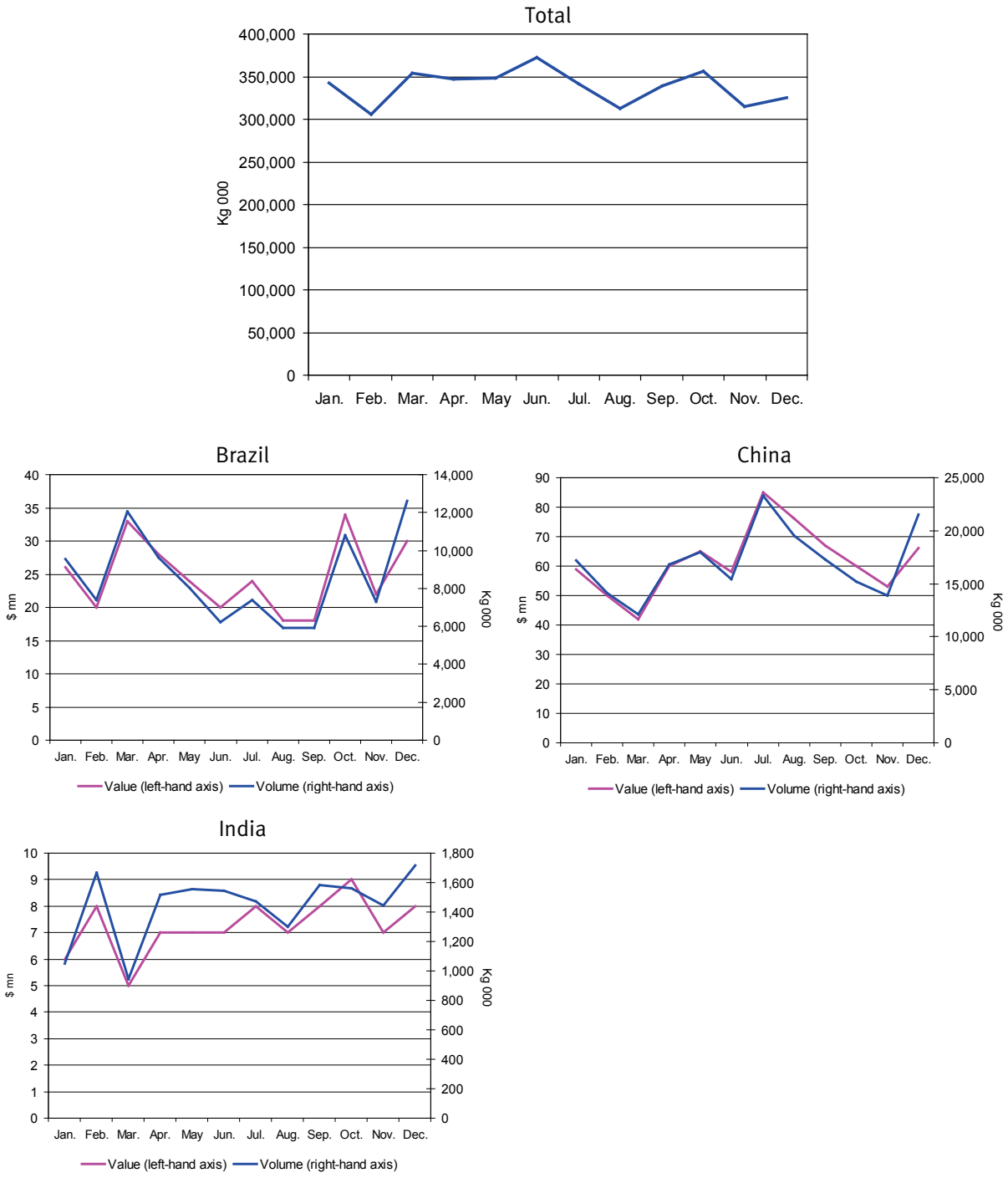
Figure 3a.16: Women's woven clothing – EU27 imports from extra-EU and selected developing countries, 2008



Source: Eurostat COMEXT database (March 2009).

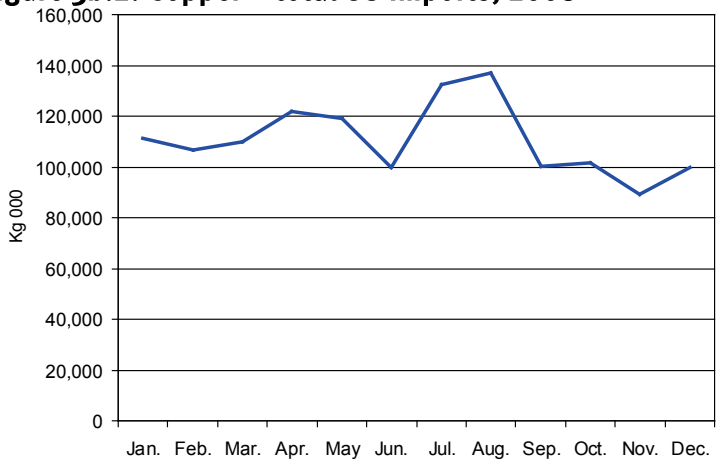
Annex 3b: US imports by month, 2008

Figure 3b.1: Aluminium – US imports in total and from selected developing countries, 2008



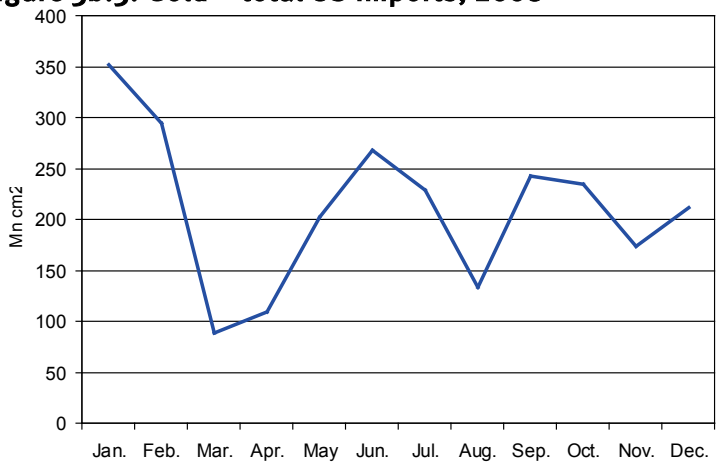
Note: There were no imports from Mozambique.
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.2: Copper – total US imports, 2008



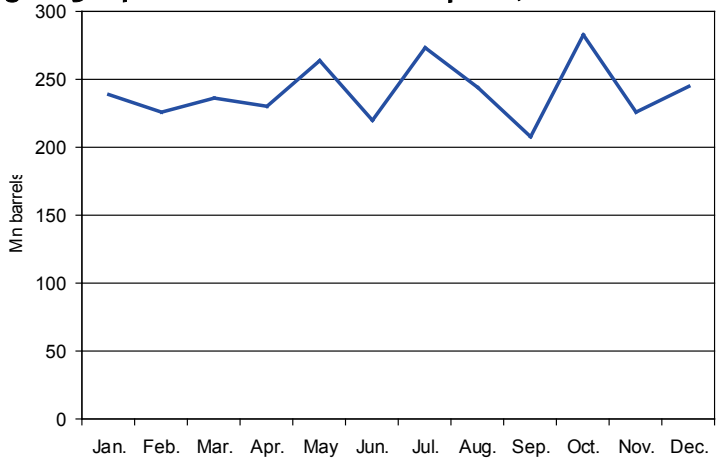
Note: This shows only imports recorded in 'kg'; there are small additional figures for imports in 'square metres'.
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.3: Gold – total US imports, 2008



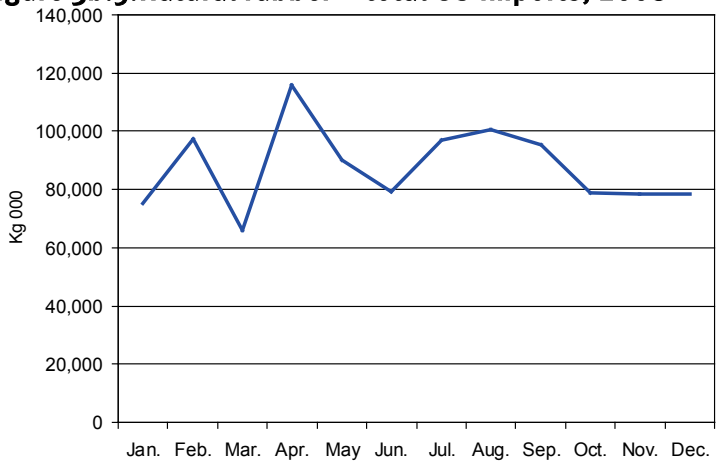
Note: This shows only imports recorded in 'square centimetres'; there are small additional figures for imports in 'kg' and 'component kg'.
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.4: Crude oil – total US imports, 2008



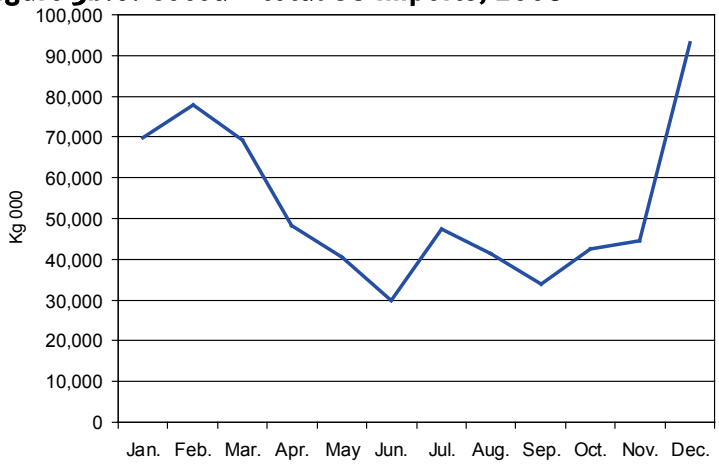
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.5:Natural rubber – total US imports, 2008



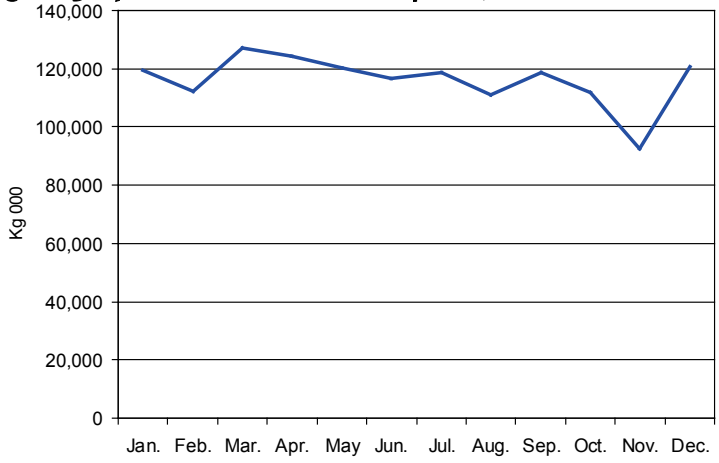
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.6: Cocoa – total US imports, 2008



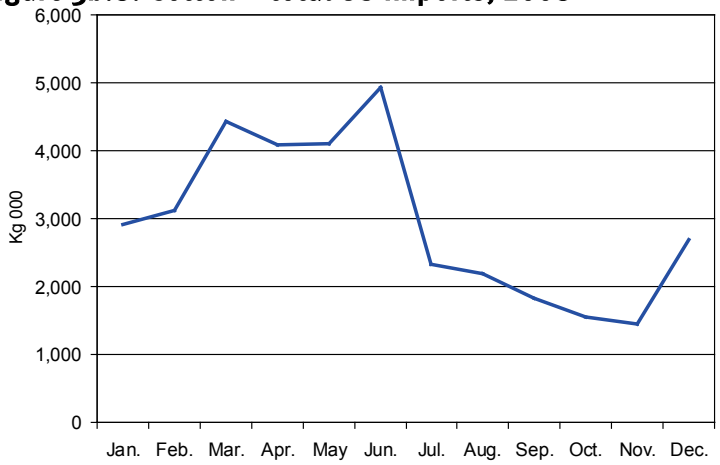
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.7: Coffee – total US imports, 2008



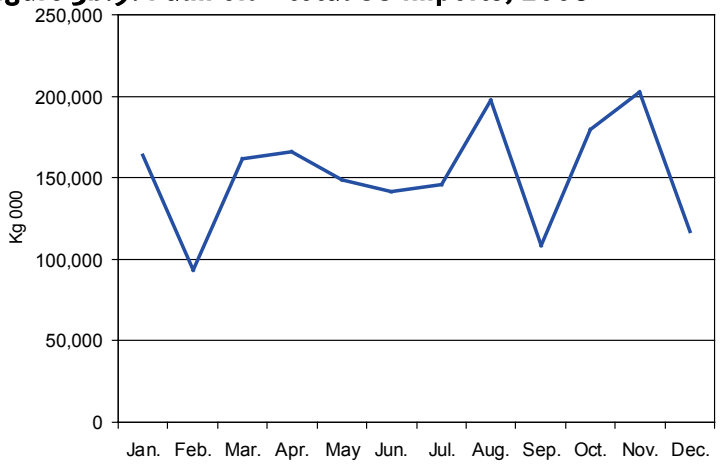
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.8: Cotton – total US imports, 2008



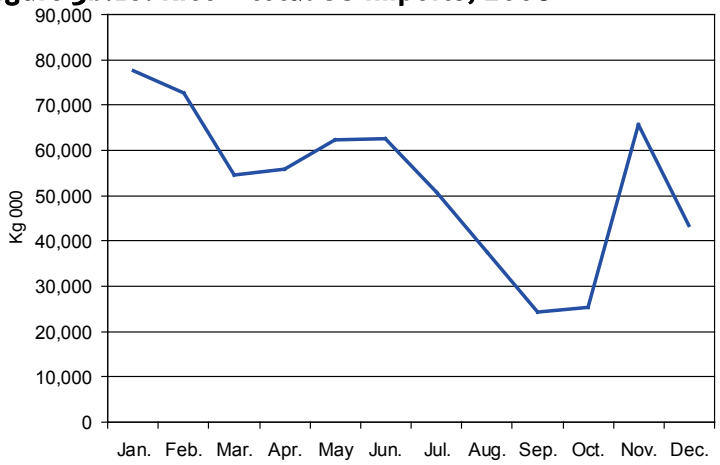
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.9: Palm oil – total US imports, 2008



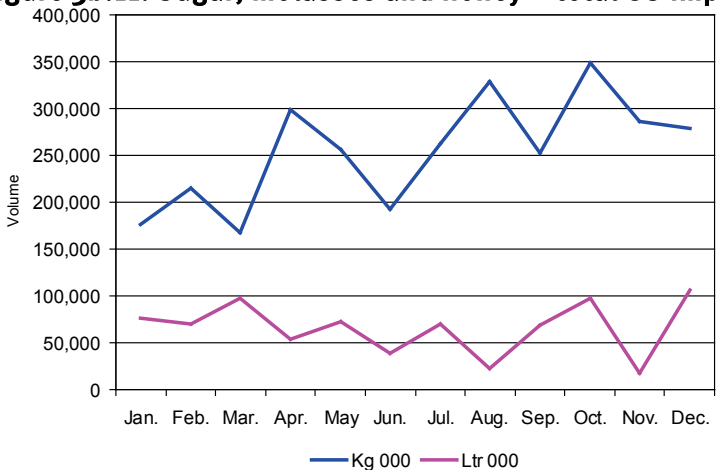
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.10: Rice – total US imports, 2008



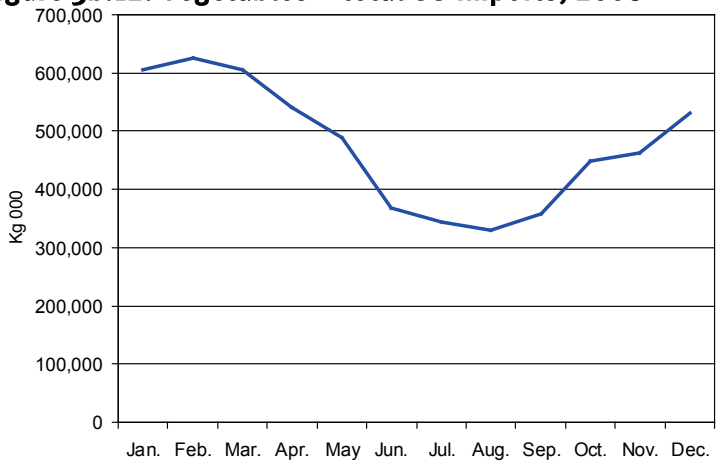
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.11: Sugar, molasses and honey – total US imports, 2008



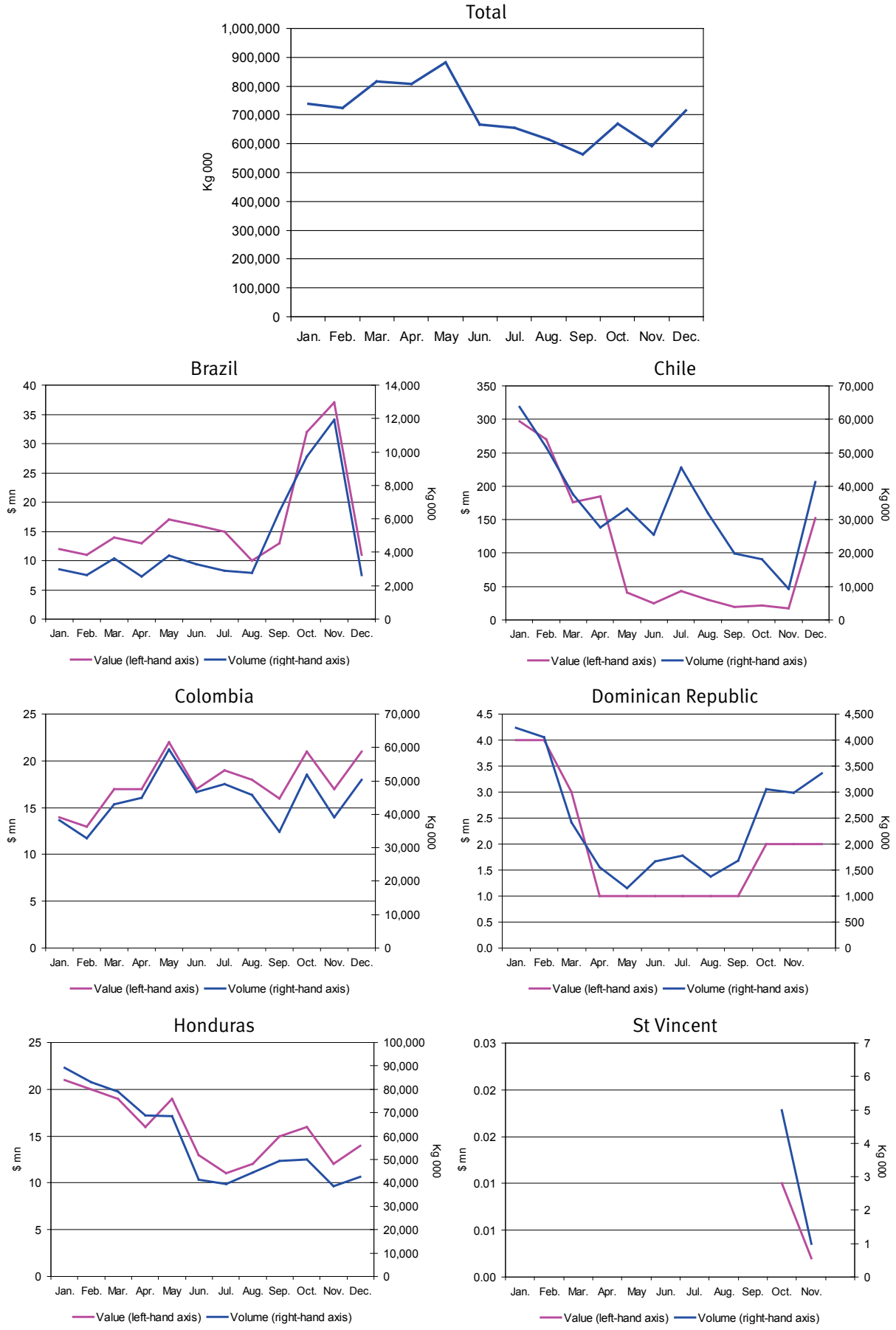
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.12: Vegetables – total US imports, 2008



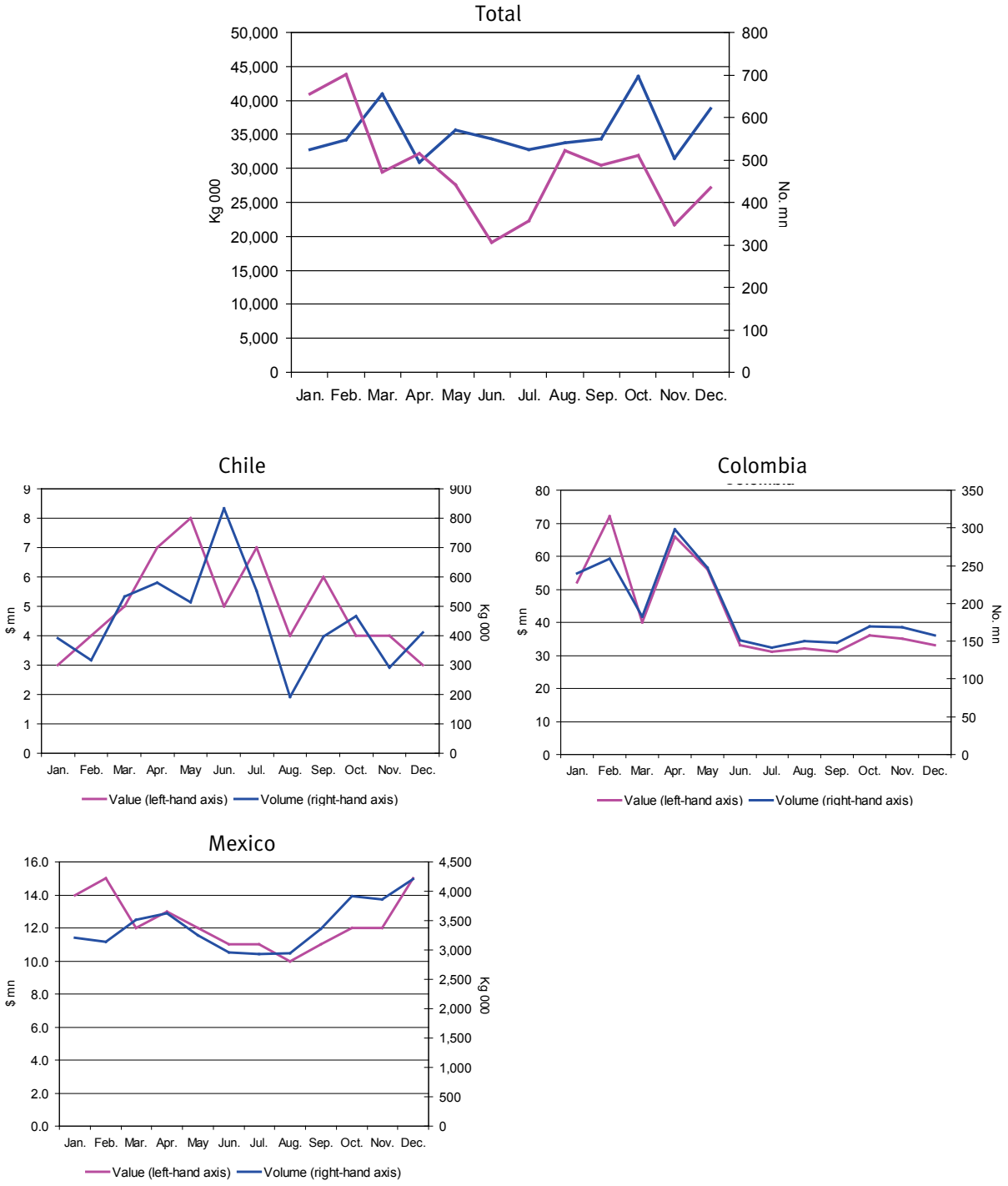
Source: USITC Interactive Tariff and Trade DataWeb (March 2009).

Figure 3b.13: Fruit and nuts – US imports in total and from selected developing countries, 2008



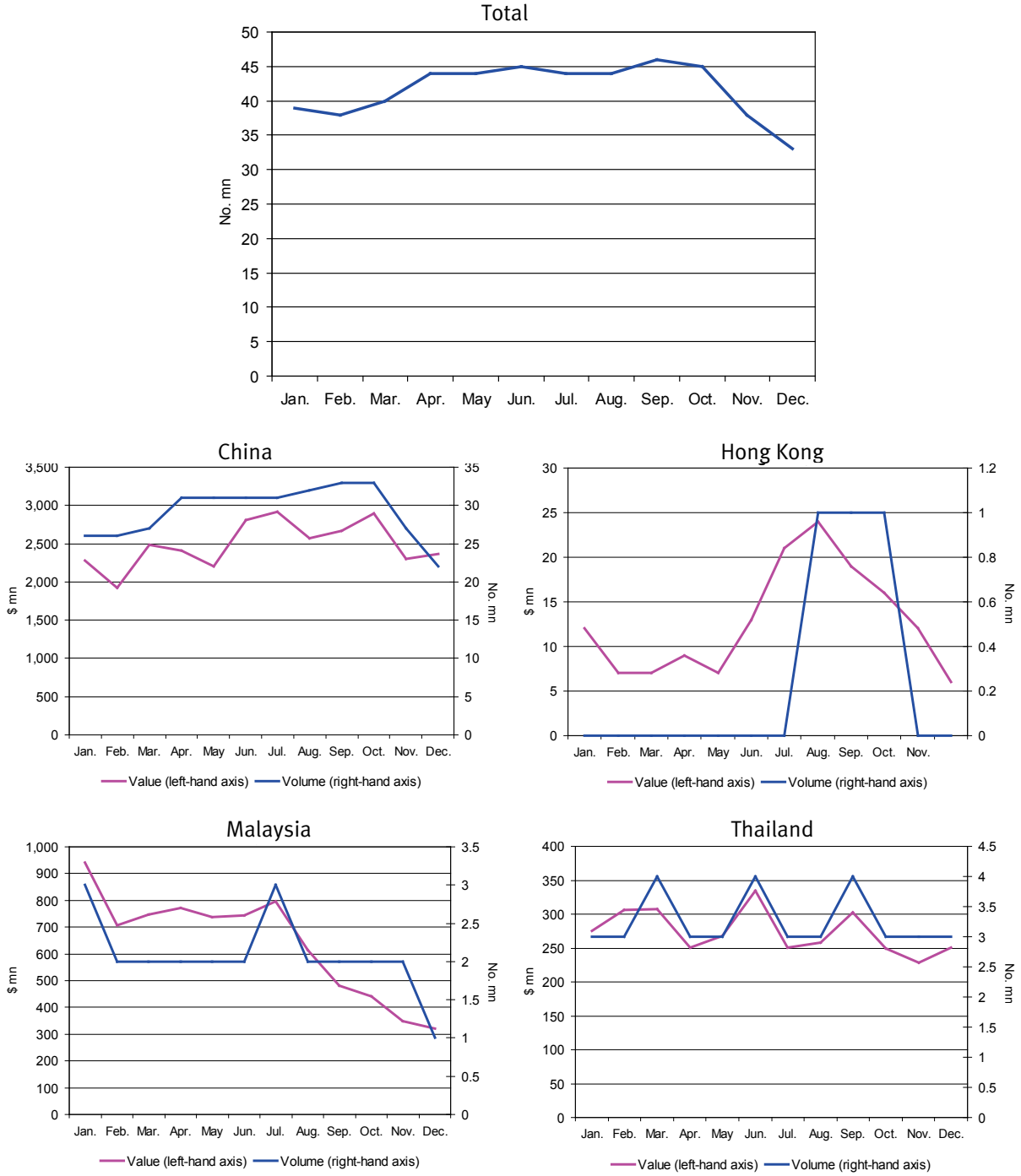
Note: The Total, Brazil and Chile graphs show only imports reported in 'kg'; there are small additional figures for imports in 'cubic metres'.
Source: USITC Interactive Tariff and Trade DataWeb (data downloaded March 2009).

Figure 3b.14: Flowers – US imports in total and from selected developing countries, 2008



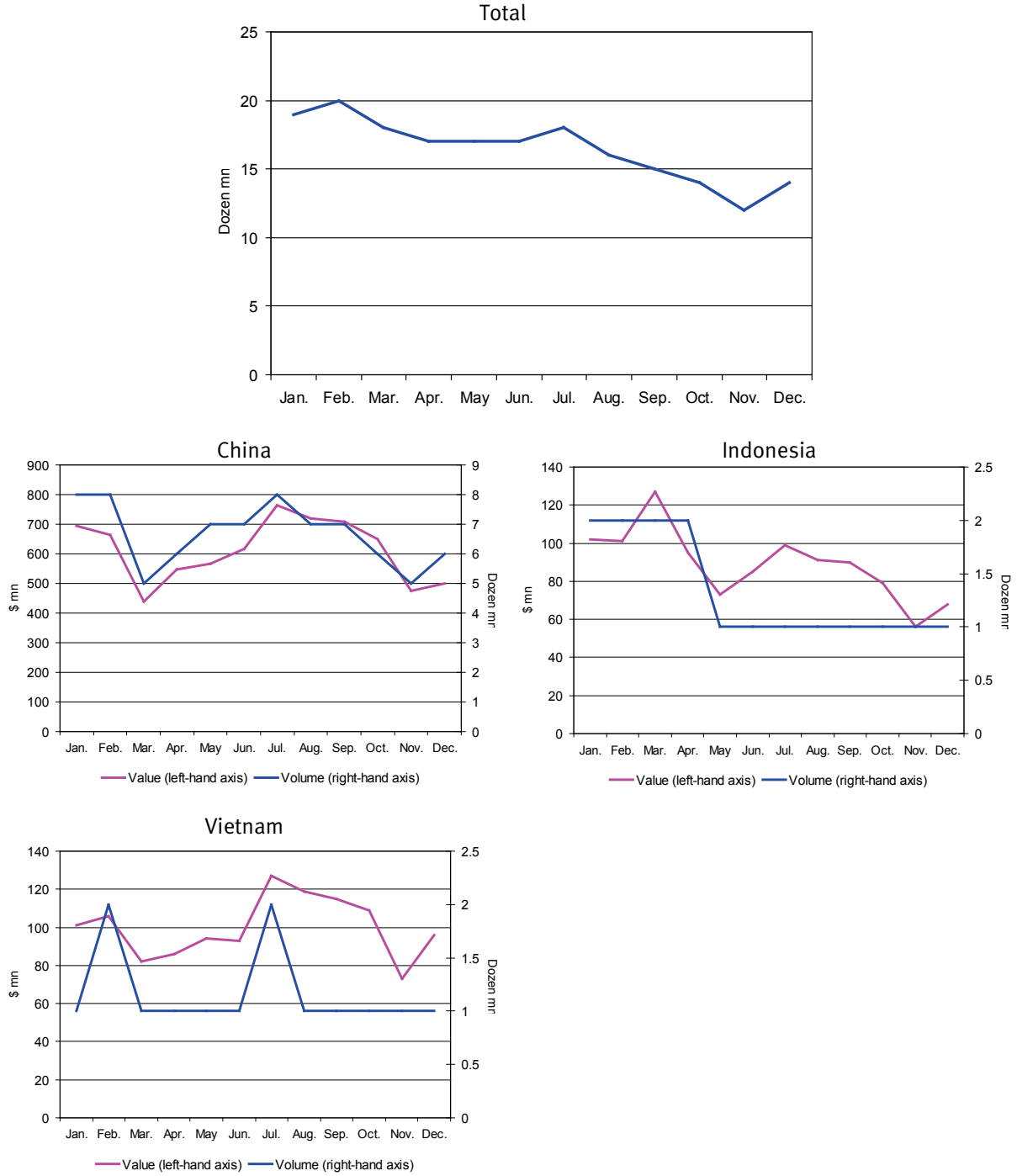
Notes: The Total and Colombia graphs show only imports reported in 'number'; there are small additional figures for imports in 'kg'. The Chile and Mexico graphs show only imports reported in 'kg'; there are small additional figures for imports in 'number'. Imports from Ethiopia and Kenya were small and sporadic.
Source: USITC Interactive Tariff and Trade DataWeb (data downloaded March 2009).

Figure 3b.15: Computer equipment – US imports in total and from selected developing countries, 2008



Source: USITC Interactive Tariff and Trade DataWeb (data downloaded March 2009).

Figure 3b.16: Woven female clothing – US imports in total and from selected developing countries, 2008



Note: These graphs show only imports reported in 'dozens'; there are very small additional figures for imports in 'number'.
Source: USITC Interactive Tariff and Trade DataWeb (data downloaded March 2009).

Annex 4: Countries included in the analysis in Section 3

The 'developing countries' included in the analysis in Section 3 of this paper are those listed as such in the UNDP Human Development Report 2007/2008 – with the omission of four countries listed there (Cyprus, Turkey, Singapore, South Korea) and the addition of two not listed (Cook Islands, Niue). This produces an initial list of 135 countries.

However, not all of these 135 countries are reporters to the UN's Comtrade database (the source of the data used in much of the Section 3 analysis) – and others either have not reported in the appropriate nomenclature (SITC Rev. 3) or for any years within the period covered by the analysis (1998–2007).[32] 115 countries were included in the analysis – see table below.

Key

Included in the analysis:
All countries in bold font (although for those in bold and italics data were available for fewer than three years in the period 1998-2007).

Not included in the analysis:
a Countries which are not reporters to Comtrade.
b Countries which have not reported any trade in SITC Rev. 3 during the period 1998-2007.

Arab	Caribbean	E. Asia	L. America	Pacific	S. Asia	SSA
Algeria	**Antigua/Barb.**	**Brunei**	**Argentina**	**Cook Is**	Afghanistan [b]	Angola [b]
Bahrain	**Bahamas**	**Cambodia**	**Bolivia**	F. Micronesia [a]	**Bangladesh**	**Benin**
Djibouti [b]	**Barbados**	**China**	**Brazil**	**Fiji**	***Bhutan***	**Botswana**
Egypt	**Belize**	**East Timor**	**Chile**	**Kiribati**	**India**	**Burkina Faso**
Iraq	**Cuba**	**Hong Kong**	**Colombia**	Marshall Is [a]	**Iran**	**Burundi**
Jordan	**Dominica**	**Indonesia**	**Costa Rica**	Nauru [a]	**Maldive Is**	**Cameroon**
Kuwait	***Dominican Rep.***	Laos [b]	**Ecuador**	Niue [b]	**Nepal**	**Cape Verde**
Lebanon	**Grenada**	**Malaysia**	**El Salvador**	Palau [a]	**Pakistan**	**CAR**
Libya [b]	**Guyana**	**Mongolia**	**Guatemala**	**Papua NG**	**Sri Lanka**	Chad [b]
Morocco	Haiti [b]	Myanmar [b]	**Honduras**	**Samoa**		**Comoros**
Occ. Pal. Terr.	**Jamaica**	North Korea [a]	**Mexico**	**Solomon Is**		Congo DR [b]
Oman	**St Kitts**	**Philippines**	**Nicaragua**	**Tonga**		Congo Rep. [b]
Qatar	**St Lucia**	**Thailand**	**Panama**	**Tuvalu**		**Cote d'Ivoire**
Saudi Arabia	**St Vincent**	**Vietnam**	**Paraguay**	**Vanuatu**		Eq. Guinea [a]
Somalia [b]	**Suriname**		**Peru**			**Eritrea**
Sudan	**Trin./Tobago**		**Uruguay**			**Ethiopia**
Syria			**Venezuela**			**Gabon**
Tunisia						**Gambia**
UAE						**Ghana**
Yemen						**Guinea**
						Guinea-Bissau [b]
						Kenya
						Lesotho
						Liberia [b]
						Madagascar
						Malawi
						Mali
						Mauritania
						Mauritius
						Mozambique
						Namibia
						Niger
						Nigeria
						Rwanda
						São Tomé
						Senegal
						Seychelles
						Sierra Leone
						South Africa
						Swaziland
						Tanzania
						Togo
						Uganda
						Zambia
						Zimbabwe

32 No data for 2008 were available at the time the analysis was undertaken.