



EUROPEAN REPORT
ON **DEVELOPMENT**

**An Agenda for International Action
on Commodities and Development:**

Issues for EU Agenda beyond the MDGs

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BACKGROUND PAPER



An Agenda for International Action on Commodities and Development:

Issues for EU Agenda beyond the MDGs

Synopsis

The overarching objective of this paper is to examine the recent developments and experiences in commodity markets, trade and production in order to gain a deeper understanding of commodity related developmental challenges as historically evolved and to formulate practical policies that the international community could adopt in addressing these challenges by placing commodity issues as one of the core items on post-MDG agenda.



MOBILISING EUROPEAN RESEARCH
FOR DEVELOPMENT POLICIES



Disclaimer

The content of this background paper does not reflect the official opinion of the European Union or of its Member States. Responsibility for the information and view expressed lies entirely with the authors.

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Contents

| | |
|--|------------|
| Contents | iii |
| Tables, figures and boxes | iv |
| Abbreviations | v |
| 1. Introduction | 1 |
| 1.1 Background | 1 |
| 1.2 Objectives and Outline | 5 |
| 2. Commodity Dependence as Development Challenge: Main Characteristics and Negative Feedback Mechanisms | 8 |
| 2.1 Reliance on commodities as default option to access international trade and emergence of commodity dependence | 8 |
| 2.2 Identifying commodity dependence as a basis for policy | 9 |
| 2.3 Negative feedback mechanism of commodity dependence as a macroeconomic condition | 12 |
| 3. Recent Changes in Agricultural Commodity Sectors in CDDCs | 15 |
| 3.1 Institutional environments affecting smallholders in global commodity value chains | 15 |
| 3.2 Are market-based instruments effective as risk hedging for producers? | 16 |
| 4. Critical Evaluation of EU's ACP Agricultural Commodity Programmes and Action Plan | 19 |
| 4.1 The framework of EU action | 19 |
| 4.2 The All-ACP Agricultural Commodities Programme | 20 |
| 4.3 Drawing lessons from A3CP for future action | 21 |
| 4.4 Implications for the EU Raw Materials Initiative | 23 |
| 5. Recent Price Dynamics in World Commodity Exchanges | 25 |
| 5.1 Unprecedented swings and continued high volatility of commodity prices | 25 |
| 5.2 Changing market fundamentals over the last decade | 26 |
| 5.3 Increasing participation of financial investors in commodity derivatives markets | 28 |
| 5.4 The financialisation hypothesis as an explanation for excess price volatility | 31 |
| 6. International Policy Agenda on Commodities and Development: The Case for Two Global Stabilisation Mechanisms | 33 |
| 6.1 Why is global action required? | 33 |
| 6.2 The case for innovative schemes to reduce excessive price volatility in world commodity exchanges | 34 |
| 6.3 The case for an innovative contingent facility for mitigating income shocks from commodity price movements | 36 |
| 7. Concluding Remarks | 38 |
| References | 41 |
| Annex 1 – EU All-ACP Agricultural Commodities Programme (A3CP) | 45 |
| Annex 2 – On the definition of commodity | 51 |

Tables, figures and boxes

Tables

| | |
|--|----|
| Table 2.1 Composite indicator of commodity dependence for top 20 countries | 11 |
| Table 5.1 Commodity Price Developments, 2008-9 | 26 |

Figures

| | |
|---|----|
| Figure 1.1 Historical Trends in Real commodity Prices, 1862–1999 | 1 |
| Figure 1.2 Real Non-Fuel Commodity Prices: 1900–2015: Are Commodity Prices in a Super Cycle? | 2 |
| Figure 1.3 Historical Trend in Real prices by commodity groups | 2 |
| Figure 1.4 Monthly Commodity Price Indices by Commodity Group, Jan. 2000-May 2012 (2000=100) | 3 |
| Figure 1.5 Share of primary commodities in exports by country groups | 6 |
| Figure 2.1 Indicators of commodity dependence and its components for Australia, Ethiopia and Zimbabwe | 11 |
| Figure 4.1 A3CP allocation vs shares of individual commodities in combined exports of food and agricultural non-food items | 21 |
| Figure 5.1 Commodity Prices in Global Recessions and Recoveries: A comparison of the episode of 2007-9 and previous recession and recovery cycles (Percentage change indices, 2005=100) | 25 |
| Figure 5.2 Estimated Index Trader Positions and Commodity Prices, January 2006-June 2009 | 30 |
| Figure 5.3 Outstanding Volumes of Commodity Derivatives Contracts in Futures and Options Exchanges and OTC Deals | 30 |
| Figure A1. A3CP funding allocation by commodity and region, % of total | 47 |

Boxes

| | |
|--|----|
| Box 2.1 Identifying a broader commodity dependence indicator | 10 |
| Box 3.1 CFC Pilot Price Risk Management Scheme for Cocoa Farmers | 17 |
| Box 7.1 State-contingent income-shock facility | 38 |

Abbreviations

| | |
|--------|--|
| A3CP | All-ACP Agricultural Commodities Programme |
| ACP | African, Caribbean and Pacific |
| BoP | balance of payments |
| CCFF | Compensatory and Contingency Finance Facility |
| CCL | Counter-Cyclical Loan |
| CDDCs | Commodity Dependent Developing Countries |
| CFTC | US Commodity Futures Trading Commission |
| CU | Coordinating Unit |
| CU | Coordinating Unit |
| EVI | Economic Vulnerability Index |
| GDP | Gross domestic product |
| HIPCs | High Indebted Poor Countries |
| ICA | International Commodity Agreements |
| ICA | International Commodity Agreements |
| IFIs | International Financial Institutions |
| IMF | International Monetary Fund |
| IOs | international organisations |
| KOWs | Kick-off Workshops |
| LAC | Latin America and the Caribbean |
| LDCs | Least Developed Countries |
| LICs | low-income countries |
| MDRI | Multilateral Debt Relief Initiative |
| MICs | Middle-income countries |
| NGOs | non-governmental organisations |
| POPs | put options and participatory options |
| PSC | Programme Steering Committee |
| RMI | Raw Materials Initiative |
| SSA | sub-Saharan Africa |
| TNCs | transnational corporations |
| UNCTAD | United Nations Conference on Trade and Development |
| USA | United States of America |

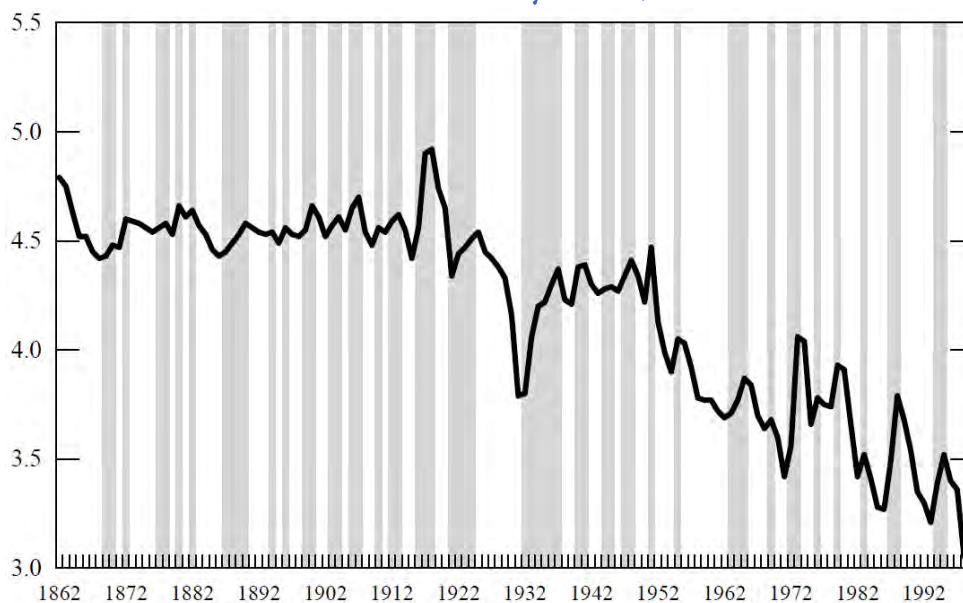
1. Introduction

1.1 Background

Many newly independent countries in the early post-war period were linked to the world economy through primary commodity exports. Consequently, the academic and policy debate on trade and development and the North–South economic relations was very much dominated in the 1950s and 1960s by the problems of ‘commodity dependence’ and how to accelerate the process of industrialisation and diversification of mono-cultural economic structures. Two features of primary commodity prices were seen as a severe impediment to economic development of commodity-dependent developing countries (CDDCs): (a) the declining terms of trade in commodity export prices relative to imports of manufactured goods from developed countries; and (b) the high price volatility and instability. Prebisch (1950) and Singer (1950) explained the first trend in terms of the critical differences affecting demand and supply between primary commodities and manufactured goods. Frequent shocks to the fundamental demand–supply relationship of physical commodities were manifested in high price volatility due to their low short-term price elasticities.

Although the Prebisch–Singer hypothesis has been not been accepted as a universal phenomenon, most detailed statistical analyses of historical time-series data for commodity prices up to the 1990s (e.g. Deaton, 1999; Cashin and McDermott, 2002) confirm the two regularities in commodity prices noted above. For example, analysing the behaviour of real commodity prices over the period 1862–1999 (Figure 1.1.A),¹ Cashin and McDermott (2002) find that (a) large price volatility dominates the relatively small secular decline in real commodity prices; and (b) the real commodity index fell by 80% between 1900 and 1999, ending the century at a record low, with increasing annual volatility and much shorter price cycles under the flexible exchange-rate regime of 1972–1999.

Figure 1.1 Historical Trends in Real commodity Prices, 1862–1999

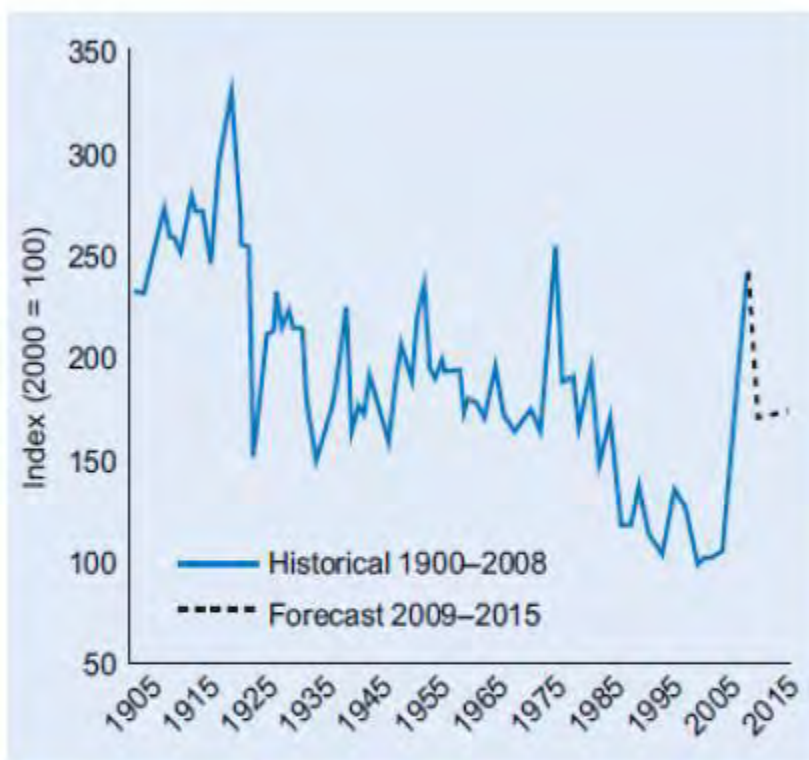


Note: Log of real price of industrial commodities

Source: Cashin and McDermott (2002, Figure 6)

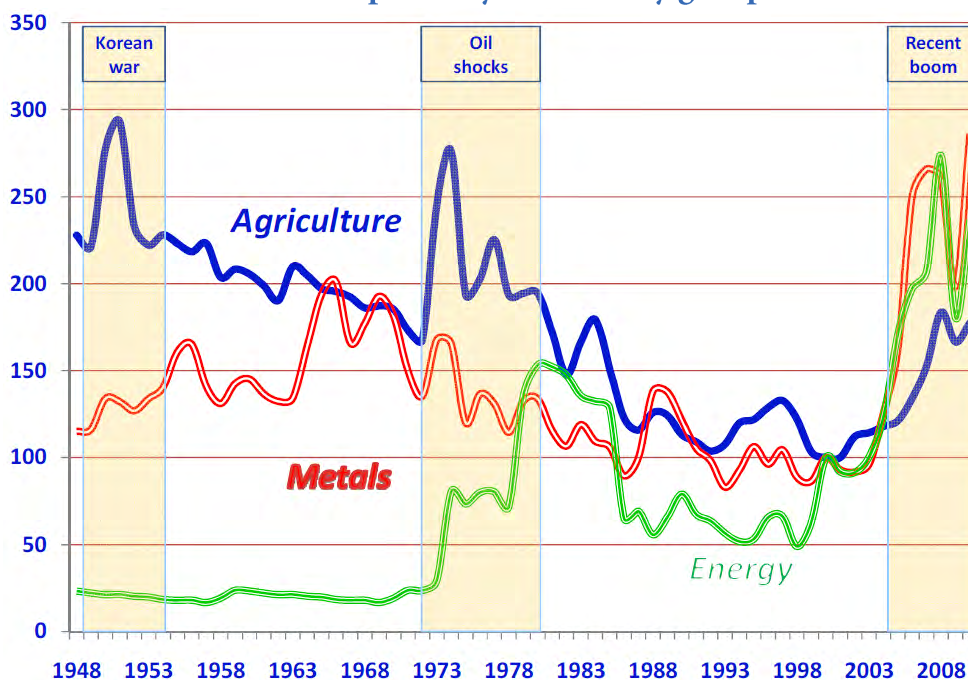
¹ Their analysis is based on The Economist’s index of industrial commodity prices – the longest dataset publicly available. It covers textiles, metals and non-food industrial commodities. The real index is calculated by deflating the nominal industrial commodity-price index (dollar-based with base 1984–5=100, weighted by the value of developed-country imports) by the GDP deflator of the USA.

Figure 1.2 Real Non-Fuel Commodity Prices: 1900–2015: Are Commodity Prices in a Super Cycle?



Sources: Grilli and Yang (1988); Pfaffenzeller et al. (2007).
 World Bank estimates 2004–08, forecasts 2009–15.
 * Indexes, 2000=100. Deflated by unit value of manufactured exports.

Figure 1.3 Historical Trend in Real prices by commodity groups

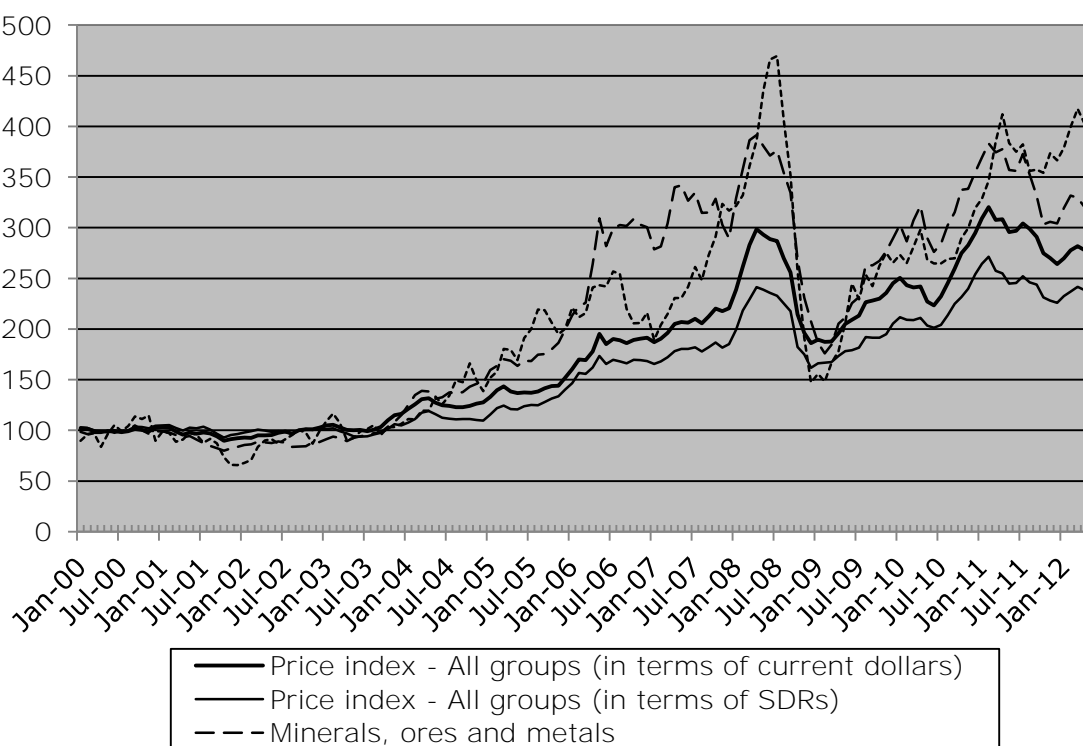


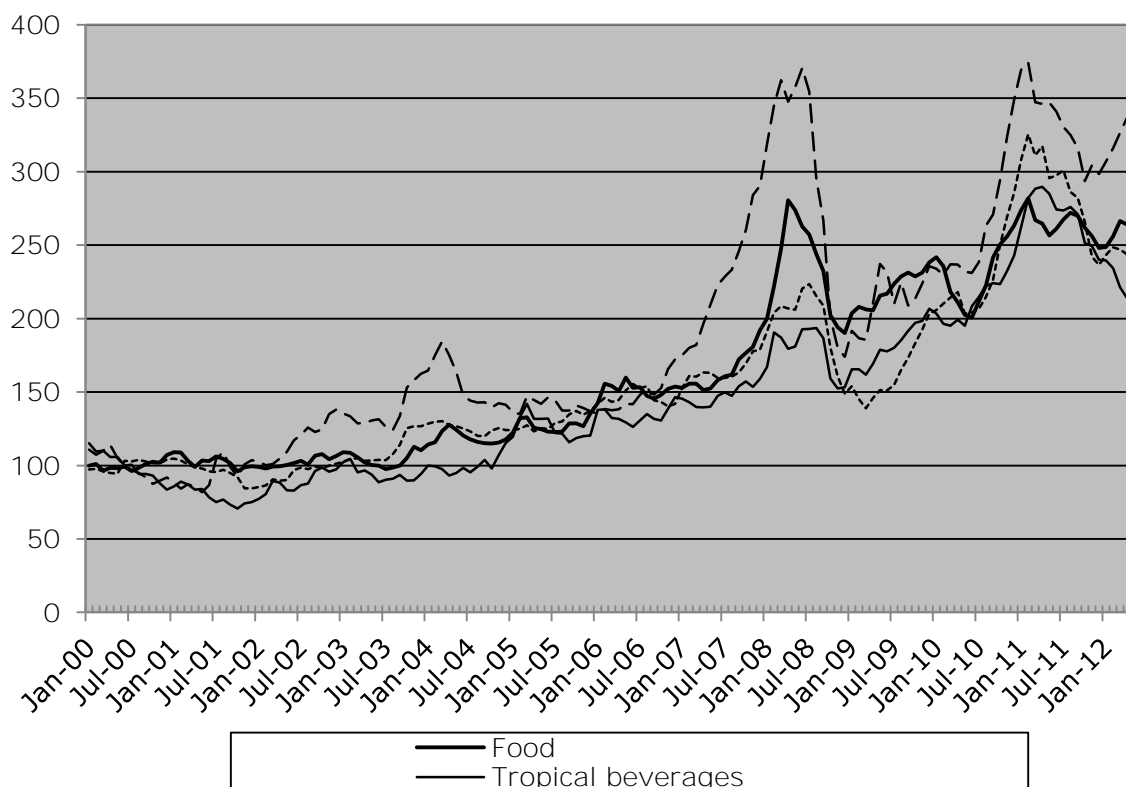
Source: Baffes and Haniotis (2010, Figure 1).
 Note: MUV = Unit-Value of manufactured goods.

From Figure 1.1.A, two observations can be made specifically in relation to the movements of real commodity prices in the 1980s and 1990s. First, large price cycles have become shorter and more frequent with increased amplitude. Second, there was a collapse of real commodity prices at the start of the 1980s, following the boom triggered by the 1973–1974 oil crisis and the period of highly volatile prices throughout the 1970s. The deteriorating terms of trade for primary commodities continued for the next 20 years, which had a devastating impact on many CDDCs, many of which had to endure two decades of severe economic and debt crises.

The beginning of the current millennium saw a significant turnaround in primary commodity prices. After two decades of low, at times dwindling, prices, many primary commodities have registered a steep increase in nominal prices since 2002, reaching an all-time high in early and mid-2008, just before the onset of the global financial crisis (see Figure 1.4 below). The increase in *nominal* price was so marked that it resulted in a sharp upturn in *real* commodity prices over the 2000–2010 period (see Figure 1.2). The scale of the increase differs among commodities and *real* prices of agricultural commodities are still lower than the peaks attained during the Korean war and oil shocks of the early 1970s (Figure 1.3).

Figure 1.4 Monthly Commodity Price Indices by Commodity Group, Jan. 2000-May 2012 (2000=100)





Source: IMF Commodity price index

This led many observers to conclude that commodities had entered a new price super-cycle in the early 2000s (e.g. Kaplinsky, 2010). We should note, however, that high volatility is an equal or more significant feature of commodity prices to date. As shown in Figure 1.4, after going almost into free fall in the last quarter of 2008, several ‘high-profile’ commodities continued to experience large swings and had almost returned to the pre-crisis peak towards early 2011. With growing concern about the possibility of renewed food and fuel crises that could jeopardise the fragile global recovery, commodity prices experienced another marked fall in connection with the sharp slowdown of the global economy amidst the worsening euro crisis. At the time of writing in mid-2012, agricultural production data seem to indicate a forthcoming global shortage of staple food crops. A new short-term boom–bust cycle of commodity prices may already be in the making.

The recent episodes highlight the importance of paying attention to the development challenges facing commodity-dependent low-income countries (LICs), as they remain extremely vulnerable to price volatility and have little resilience. Although a number of developing countries in Africa that are rich in oil and minerals, including those previously classified as High Indebted Poor Countries (HIPC), have experienced a high average growth rates, ‘riding’ the commodity boom since 2002, many have yet to reduce their vulnerability and exposure to commodity price shocks. They have not achieved economic diversification as a basis for more articulated economies with vibrant spill-over effects across the entire economy. In fact, many export-crop farmers did not benefit from the agricultural commodity prices registered in world markets at the height of the booms. For example, as discussed below, farm-gate prices paid to smallholders for cotton and coffee by private traders, reportedly acting on behalf of transnational corporations (TNCs), remained meagre throughout the boom period.

While commodity dependence had generally been recognised as an obstacle to economic development, efforts to address its root causes and negative longer-term effects have had at best limited success over the last 50 years. It was especially unfortunate that during the debt crisis of the 1980s and 1990s, commodity-related development issues did not feature in the global policy debate, in particular in the positions taken by the International Financial Institutions (IFIs), which took charge of resolving the protracted debt crisis.

Although there is now a clear acknowledgement that their high vulnerability to external shocks represents a significant development challenge to fragile LICs, the international community has taken no serious action to deal with the ‘commodity-dependence trap’ by creating a global facility to address excessive volatilities in commodity prices and mitigate their negative impacts on development.

Furthermore, the extremely volatile commodity prices over the last decade are not only a threat to the fragile recovery of the global economy but also a heavy burden to LICs that are heavily dependent on imports of grains, energy and other strategic commodities for meeting their basic needs. These import-dependent economies are equally subject to volatile commodity prices in managing their balance of payments (BoP). The soaring prices of key commodities in 2007–2008 and 2011 hit the world economy at the time of the severe financial crisis in the advanced economies, and the subsequent feeble recovery of the global economy, with many European countries experiencing deep double recessions amidst the sovereign debt and euro crises. As the higher cost of imports is swiftly reflected in domestic prices, the rapidly rising price of food and fuel pose a particularly severe threat to the livelihoods of the poor in developing countries, jeopardising their hard-won progress towards meeting the MDGs. Prakash (2011) discusses the evidence of the welfare costs of volatility in terms of food security versus the adverse impact of volatility-reducing regulation. He argues that cost estimates and supposedly evidence-based policies should take account of the long-term impact of short episodes of market volatility. While such episodes may be relatively rare and short-lived, they can trigger ‘a downward spiral of rising vulnerability’ and have massive long-term implications for vulnerable economies. Our discussion links this vulnerability to reliance on commodities for participation in international trade, which remains the main economic scenario for many LICs. If commodity issues continue to be ignored, the goal of achieving food security for the poor as a basic human right – one of the critical aspirations of the international community – could soon be seriously compromised in many politically and socially fragile LICs.

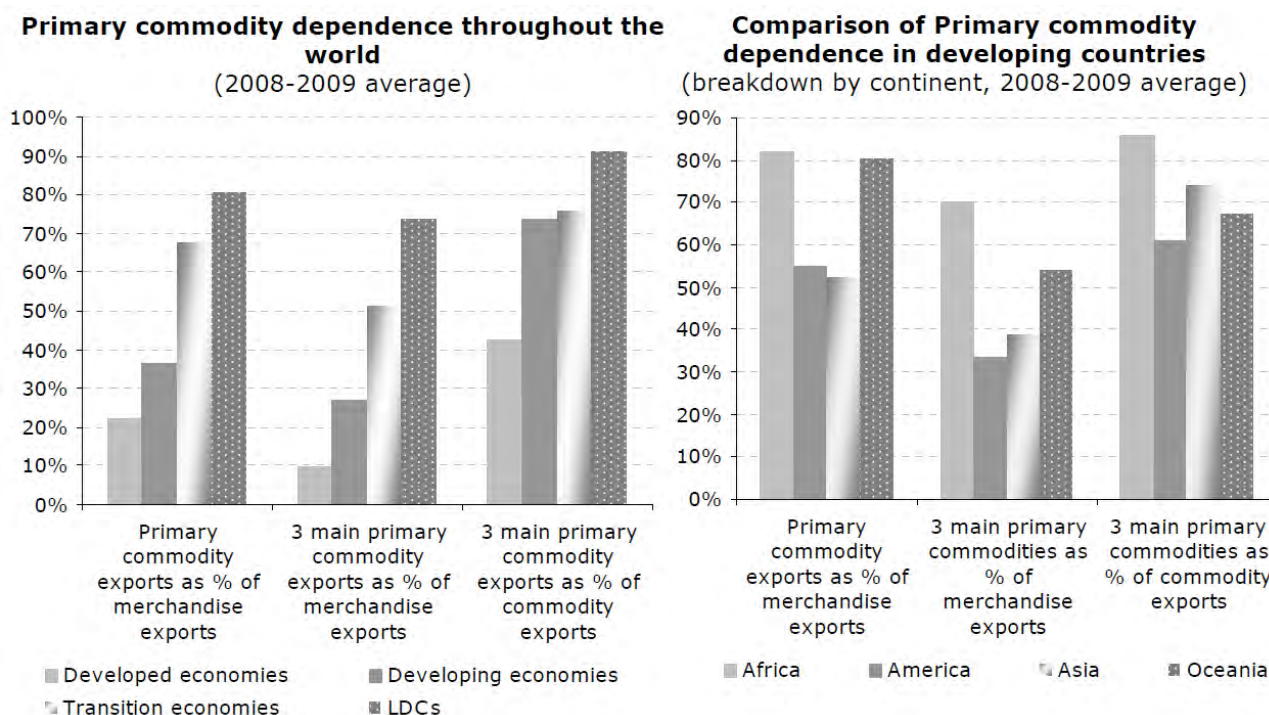
1.2 Objectives and Outline

This paper examines recent developments and experiences in commodity markets, trade and production in order to gain a deeper understanding of commodity-related development challenges and to formulate practical policies that the international community could adopt by making commodity issues central to any post-MDG agenda.

In this overall context, the paper first discusses the critical development issues faced by a particular group of LICs with high degree of dependence on exporting agricultural primary commodities, where persistent pockets of commodity dependence and poor economic growth accompany a high degree of commodity reliance.² For instance, most countries in sub-Saharan Africa (SSA) rely on a small number of traditional commodity exports for anything up to 40% of their total revenues. In fact, the commodity-dependence syndrome has a particular regional dimension for poor countries in SSA and small countries in the Central America and Oceania, many of which are classified as Least Developed Countries (LDCs) and treated as African, Caribbean and Pacific (ACP) countries in EU policy documents and negotiations (see Figure 1.5).

² Mineral and oil-based commodity-dependent countries face a distinct set of policy issues, in particular in relation to macroeconomic management with resource rents over commodity price cycles as well as the governance and political economy of distribution of resource rents (see, for example, Nissanke, 2010a, b; 2011 on the ‘resource curse’). These issues are beyond the scope of this paper, which focuses on agriculture-based commodity-dependent economies.

Figure 1.5 Share of primary commodities in exports by country groups



Source: UNCTAD, 2011

In these CDDCs the commodity sector is expected to play a major role in fostering socially inclusive and sustainable development for years to come. This paper examines commodity dependence and the challenges these fragile economies must surmount in order to establish a robust and inclusive economic base for advancing social development. Our understanding of commodity dependence as source of specific vulnerability that impedes growth and development underpins our formulation of international development actions that could assist CDDCs to overcome the ‘commodity-dependence traps’.

The paper also addresses the wider implications of the recent extreme volatility of commodity prices for the global economy, including LICs dependent on imports of basic commodities, by examining the key factors for such volatility. It is argued that commodity issues should be regarded as one of key areas requiring concerted global policy action, not just from the perspectives of CDDCs’ development but also in order to achieve the development aspirations of all LICs in the post-MDG period. Hence, the paper renews the call for effective global facilities and mechanisms, focusing on the need to reduce extreme price and income volatility originating from world commodity markets, to ensure that the socioeconomic development of LICs that export and import commodities is not further derailed.

Set against these broader objectives, the paper considers the role of the EU and the global community in taking up commodity issues beyond 2015. It discusses what alternative or complementary instruments or interventions might best address the high vulnerability of LICs to the adverse consequences of commodity price volatility and exogenous shocks.

The paper is structured as follows: in Section 2 we discuss commodity dependence as a development challenge, viewing it as a particular kind of structural vulnerability – exposure and resilience being its two components. This should help to identify countries with a high degree of commodity-related vulnerability as a specific group, the Commodity Dependent Developing Countries (CDDCs). In CDDCs, commodities tend to serve as default trading scenario and this reliance could create commodity-related vulnerability. Then, we examine negative feedback mechanisms operating as a macroeconomic condition arising from commodity-dependent economies, leading to low investment in productive facilities and support mechanisms, and poor

public services. In Section 3, we examine recent developments affecting the CDDC agricultural commodity sector at the national level, covering conditions such as institutional environments facing smallholders and poor farmers in global value chains and the coping mechanisms available to them. In Section 4 we analyse the EU's All-ACP Agricultural Commodities Programme or A3CP and its practical efforts to assist CDDCs, as envisaged in the Action Plan for addressing agricultural commodity chains, dependence and poverty.

In Section 5 we examine the recent heightened volatility of commodity prices in world markets resulting from two interrelated phenomena: (a) structural changes affecting demand–supply fundamentals; and (b) the increasing finalisation of commodity markets. This is followed by policy discussions in Section 6, in which we highlight the critical deficiencies in global policies, and renew the case for effective global mechanisms to address excessive price volatilities as well as global income-shock management facilities for dealing with BoP crises and commodity-related development challenges facing countries that export and import commodities. Section 7 offers concluding remarks to guide policy formulation with a view to placing commodity-related issues firmly on any post-MDG agenda.

2. Commodity Dependence as Development Challenge: Main Characteristics and Negative Feedback Mechanisms

2.1 Reliance on commodities as default option to access international trade and emergence of commodity dependence

The economic share of commodities is used as the most direct and visible measure for evaluating their role and impact. If commodity dependence is understood as a reflexive process, this share should be considered an outcome or a symptom of underlying development problems, which should then be the focus of action.

For many LICs, the heavy reliance on commodities represents the main baseline scenario for participating in global trade. An alternative would be to use the advantage of lower labour costs, but the 1990s saw the decisive entry into global markets of large Asian economies such as China and India, which have huge reserves of unskilled labour with which other LICs would find it hard to compete. Hence, for the foreseeable future, most are likely to remain reliant on exporting commodities as their means of participating in the global trading system.

Such a high degree of reliance on trade in commodities is not in itself a problem. A number of recent studies (e.g. Haber and Menaldo, 2010) highlight some of the positive aspects of commodity reliance for poor countries. There are also plenty of historical precedents in countries such as in the USA, Canada or a number of Nordic countries, whose economic take-off was based largely on their natural resource endowments and primary commodity exports. Even today, Australia and Canada have a rather a large share of primary commodities in their export structures.

A comparative analysis of economic performance in the post-war period makes it clear, however, that the position and development experiences of highly commodity-dependent economies since the early 1980s are in sharp contrast to those of newly industrialising developing economies in the South. Since the 1980s, commodity-dependent, resource-rich economies in SSA and in Latin America and the Caribbean (LAC) have systematically underperformed in economic growth and poverty reduction compared to successfully industrialising developing economies, mostly in Asia (Nissanke and Thorbecke, 2010). In discussing the economic performance of LAC countries, Ocampo and Parra (2006) attribute the cycles of growth spurts and collapses of economies dependent on primary commodity exports since 1950s to their susceptibility to external shocks, and identify a 'global development cycle' that circumscribes the possibility of achieving sustainable growth.

At the same time, some middle-income, resource-rich countries such as Brazil, Argentina, Malaysia and Thailand could be seen as emerging 'commodity developers' that are reducing their dependence on exporting primary commodities. Many have diversified from exporting raw commodities to export-oriented industrialisation, as in Indonesia and Malaysia, or processing commodities via the expansion of agribusiness as Chile and Columbia have done. These countries have clearly benefited from recent increases in demand for their agricultural and resource-based products. Vietnam, though still a LIC, is fast approaching the status of 'commodity-developer' through its rapid growth of rice and coffee accompanied by diversification into manufacturing and other industrial activities. In contrast, 'commodity dependence' remains severe in ACP countries, many of which are classified as LDCs. ACP countries have also seen a steady decline in their share in world trade for several cash crops.

It can be suggested, therefore, that a high reliance on commodities can in some cases produce a high degree of vulnerability when an economy is exposed to global market forces, and with it, multiple challenges to the sustainability of a country's economic structures. In fact, as discussed below (Section 2.3), in the absence of appropriate domestic and international policies, the effects of commodity reliance could amount to a

negative feedback, with many documented cases of structural vulnerabilities severely impeding growth. Hence, we argue that the failure to resolve development challenges resulting from a reliance on commodities at the national, regional and global level probably underpins its adverse effects on economic development, manifesting itself in food insecurity, social instability etc. These and other conditions could turn *commodity reliance* into *commodity dependence*, a persistent economic vulnerability related to a high share of commodities that adversely affects socioeconomic development and food security.

2.2 Identifying commodity dependence as a basis for policy

In designing policies and activities to address the development implications of commodity dependence, there is the recurrent issue of defining it in such a way as to make it possible to identify countries and regions requiring assistance.

The EU–ACP Agricultural Commodities Programme (assessed in Section 4), indicates that ‘priority beneficiaries were countries that are “highly dependent on a small number of agricultural products (...) and whose dependence affects a large number of poor people”’. This implies (a) an understanding of commodity dependence as the concentration of economic activity in one or more agricultural commodities; and (b) the disproportionate share of the population dependent on those sectors. The design of the A3CP also implies a premise (c) that targeting commodity-dependent countries for special assistance is an effective way to allocate development resources.

The EU Action Plan on commodities further states that ‘...the term “CDDC” is used for convenience [and] refers to countries that are particularly exposed to developments such as price variability in international agricultural commodity markets and thus share certain development challenges. It should not be taken to suggest that a specific definition exists, or indeed should exist’. This reflects EU’s recognition that there is no commonly accepted view concerning the relation between (a), (b) and (c) above, particularly in terms of its practical application in guiding development activities.

Nevertheless, in defining commodity dependence, the economic share of commodities is used as the most direct measure available to evaluate the role and impact of commodities in a country or region. For example, Gibbon (2006) defines CDDCs as countries in which 50% or more of all merchandise exports are made up of non-oil commodities. As noted by Burger (2009) and others, however, this measure of commodity share is generally of little practical use as a criterion for development interventions. Similarly, while terms of trade for commodities is often suggested as indicating differences in growth performance (e.g. Cavalcantia et al., 2012), this indicator is of little real use because terms of trade are an emergent market outcome and unlikely to be influenced by international development action in a sustained way.

While analytically convenient and easily applied, these definitions are frequently challenged on the grounds of their relevance as effective indicators of a country’s commodity dependence and related development challenges. In particular, the statistical basis for using these definitions to predict or explain the effects of a ‘resource curse’ (Sachs and Warner, 2001) is not immune to the argument that such phenomena are better explained by domestic political and institutional variables (Acemoglu et al., 2004; Robinson et al., 2006).

Burger (2009) also notes that in the global markets, few if any commodities (e.g. cocoa) are dominated by exports from CDDCs. Because the bulk of commodity exports now appear to come from countries with a diversified export base, international policy on commodities does not equate to a policy towards CDDCs. He concludes that the share of non-fuel primary commodities continues to be ‘a mediocre indicator of the level of development’ and suggests that issues such as institutional quality, productivity and resilience also influence development outcomes.

At the same time, a study of panel data across 62 countries over the period of 1970–2003 (van der Ploeg and Poelhekke, 2009) examines the relationship between dependence on natural resources (including agricultural commodities and minerals) and growth and concludes that volatility is the key channel for a ‘resource curse’.

In particular, it was observed that in resource-rich African countries the positive direct effect of resource dependence was dominated by the indirect negative effect of volatility. Thus, resilience to volatility should also be part of our understanding of commodity dependence.

In our view, the detrimental effects of commodity dependence on development are related to economic *vulnerability*, caused by a country's reliance on commodities as main conduit for participating in world trade, resulting in its high degree of *exposure* to shocks. In this sense, commodity dependence could be viewed more accurately as the measure of economic vulnerability related to (a) a large share of commodities in the national economy; and (b) a disproportionate share of the population relying on commodity sector. Indeed, the fact that the groups of countries classified as CDDCs overlap significantly with LDCs is due to the significant contribution of commodity dependence to overall economic and social vulnerability. This is reflected in UNCTAD (2012b), which acknowledged that overcoming commodity dependence might be a precondition for graduation from the LDC group.

If this is the case, a more analytically rigorous approach to identifying CDDCs could provide a sound basis for defining the target constituency of countries and/or regions for development action on commodity-specific issues. Since there are many mechanisms to address dependence (e.g. Combes and Guillaumont, 2002), it is not appropriate to use a single indicator to measure commodity dependence. As a reflexive system, commodity dependence is affected by all the contributing elements in its multiple manifestations. This problem is further compounded by the fact that vulnerability, essentially a conditional impact of a certain class of events, cannot be measured *ex-ante*, and can only be evaluated statistically *ex-post*.

Indeed, once commodity dependence is understood as the outcome of negative feedback acting simultaneously through many channels, the need is for a composite indicator to characterise this condition and to compare countries. Such a composite indicator could be similar to the one used to define the group of LDCs (Guillaumont, 2009), which captures a degree of their structural vulnerability. For example, Guillaumont et al. (2010) suggest that LDCs are likely to be characterised by their structural handicaps. These conditions are in turn measured by two composite indicators: (a) the Economic Vulnerability Index (EVI), where vulnerability results from both the recurrence of exogenous shocks, natural or external (e.g. droughts, unstable commodity prices) and the exposure to these shocks (small size, remoteness, structure of production); and (b) the Human Development Index.

In a similar manner, we envisage that any composite indicator for commodity dependence should capture the degree of structural vulnerability of CDDCs in relation both to their *exposure* and to their *resilience* to commodity-related shocks.

Box 2.1 Identifying a broader commodity dependence indicator

The CFC study is based on panel data of 71 countries with 70% or more reliance on export commodities between 1995 and 2009 (World Bank data).¹ Using principal component analysis, there was an attempt to identify principal vectors in explaining average growth variance. This approach implicitly assumes that given the high degree of commodity export share in the sample, these vectors offer a reasonable measure of a country's capacity to manage its reliance on exporting primary commodities.

If commodity dependence is interpreted as the adverse impact of reliance on commodities for trade, it is possible to create an index of commodity dependence. The results described below are of preliminary nature and require verification and more investigation, including improvements to the dataset. These preliminary results seem to suggest that commodity dependence can be expressed as combination of four broad indicators:

- institution–growth nexus (a high value in economic governance indicator means less commodity dependence);
- economic vulnerability, including poverty, population growth, concentration of exports;

- fiscal reliance on commodities; and
- concentration of economic activity

To illustrate the results, Figure B.1 compares indices calculated for Australia, Ethiopia, and Zimbabwe, ranked as number 67, 30, and 68 respectively in terms of their reliance on commodities for exports.

Figure 2.1 Indicators of commodity dependence and its components for Australia, Ethiopia and Zimbabwe

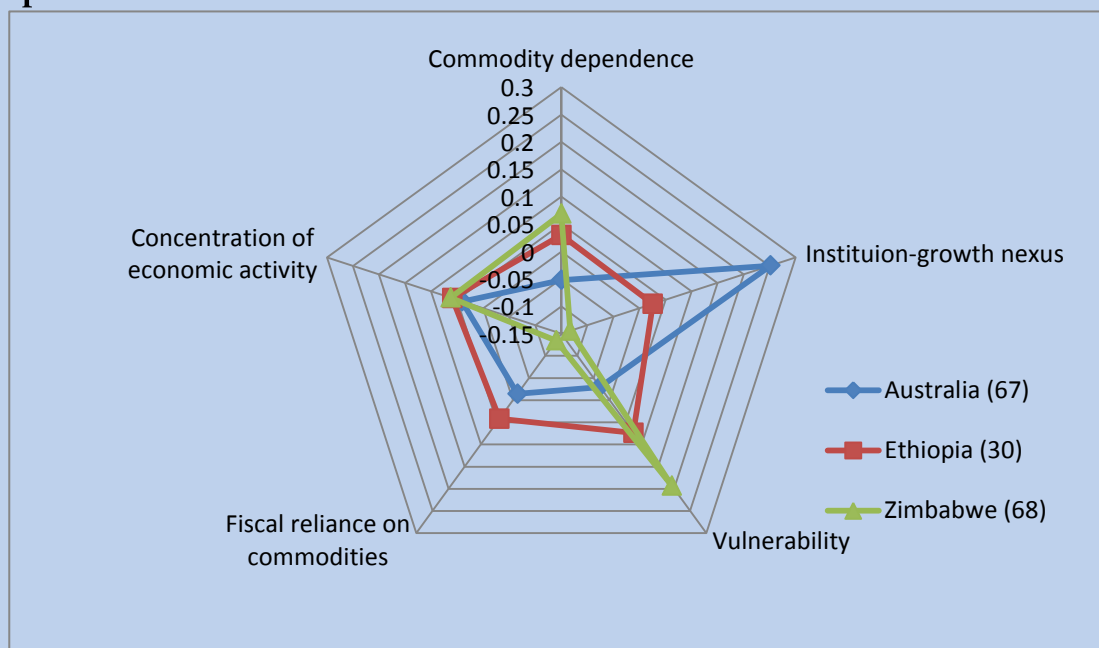


Figure 2.1 illustrates that despite comparable concentration and fiscal reliance on commodities, Australia is far less commodity-dependent than Ethiopia thanks to much better economic governance and lower vulnerability. Zimbabwe is more commodity-dependent than Ethiopia, mainly because of its economic governance and high economic vulnerability, despite its low fiscal reliance on commodities.

Table 2.1 shows the top 20 countries ranked by this composite indicator of commodity dependence.

Table 2.1 Composite indicator of commodity dependence for top 20 countries

| Rank | Country | Composite index of commodity dependence | Rank by commodity exports |
|------|------------------|---|---------------------------|
| 1 | Zimbabwe | 0.0687 | 67 |
| 2 | Gabon | 0.0552 | 13 |
| 3 | Côte d'Ivoire | 0.0428 | 53 |
| 4 | Burundi | 0.0387 | 24 |
| 5 | Nigeria | 0.0366 | 6 |
| 6 | Sudan | 0.0349 | 10 |
| 7 | Papua New Guinea | 0.0318 | 7 |
| 8 | Ethiopia | 0.0299 | 30 |
| 9 | Angola | 0.0299 | 1 |
| 10 | Afghanistan | 0.0281 | 69 |
| 11 | Congo DRC | 0.0280 | 9 |
| 12 | Libya | 0.0274 | 15 |
| 13 | Guinea-Bissau | 0.0273 | 12 |
| 14 | Congo | 0.0273 | 4 |
| 15 | Algeria | 0.0253 | 8 |
| 16 | Yemen | 0.0238 | 2 |
| 17 | Turkmenistan | 0.0235 | 31 |
| 18 | Cameroon | 0.0232 | 19 |
| 19 | Tajikistan | 0.0227 | 44 |
| 20 | Guinea | 0.0204 | 16 |

In order to provide a better analytical base in the allocation of its operations, the CFC initiated a study on the possibility of formulating a more reliable framework to identify and diagnose commodity dependence by means of a composite indicator based on measures of different aspects of commodity-related vulnerability and its development impacts (described in Box 1). While its methodology is broadly in line with arguments offered elsewhere (e.g. Burger, 2009), further research would be required to test the robustness and relevance of such composite indicators of commodity dependence if they were to be widely adopted, and the principal components analysis needs to be carefully interpreted.

The CFC exercise shows that it is technically possible to create an indicator based on a broader measure of commodity dependence. Further research on the matter should focus on the practical application of such composite measures in allocating development assistance, as compared to other criteria and the experience of recent interventions such as the A3CP.

2.3 Negative feedback mechanism of commodity dependence as a macroeconomic condition³

As discussed, commodity dependence can be viewed as the outcome of negative feedback through many channels, including CDDCs' dwindling capacity to withstand commodity shocks, effectively forcing them to bear a large share of the global costs of commodity market volatility.⁴ This macro-level mechanism has powerful economy-wide ramifications and it is likely to be a major factor in undermining a country's efforts to reduce structural vulnerability resulting from (a) its undiminished exposure to negative shocks combined with (b) a failure to build greater resilience.

In most mainstream economic literature, the under-performance of commodity-dependent economies and their lack of resilience to their exposure to commodity-related external shocks is discussed in relation to the two distinct domestic conditions said to characterise these economies: (a) the natural resource curse – domestic political economy and governance structures and weak institutions, which encourage rent-seeking, corruption from resource rents or outright resource looting;⁵ or (b) difficulties with macroeconomic management of commodity price cycles, in particular the Dutch Disease Syndrome during the commodity boom.⁶

At the same time, main factor for the lack of economic resilience in CDDCs is the failure of the international economic system to resolve commodity-related problems at the global level. Indeed, the negative feedback mechanisms arising from the commodity dependence can be manifested in an international poverty trap because of how CDDCs are integrated into the global economy. The International Poverty Trap Thesis (UNCTAD, 2002) argues that international environments and domestic conditions are not independent, but feed into each other to reinforce mechanisms of underdevelopment. Ocampo and Parra (2006) also suggest that the macroeconomic adjustments caused by, and the institutional effects of, massive shocks from global commodity markets tend to exacerbate distributional conflicts inherent in economies with high commodity dependence.

³ We use the term 'negative feedback' beyond its narrow technical meaning to refer to a mechanism that restricts sustainable economic equilibrium to a state of low-income and poor economic development.

⁴ The distribution of the damage from a shock propagating through an interconnected system depends on the resilience of individual components. To our knowledge, this condition is not well explored in the economic literature. We use a mechanical analogy to illustrate the point. Most modern cars have an engine compartment that is weaker than the passenger compartment, so that on collision the engine collapses and absorbs most energy.

⁵ See, for example, Collier (2007), Auty (2001) and Sachs and Warner (1997) on the 'resource curse'.

⁶ Mismanagement of public finance in commodity-dependent economies at the time of increased resource rents, including the use of windfalls from commodity price booms in oil- and mineral-based economies, is widely seen as a main reason for the rarity of positive feedback mechanisms in CDDCs. Among SSA economies, Botswana is often cited as an exception to the 'resource curse', as its political economic structure is seen to be conducive to better management of resource rents (Robinson and Parsons, 2006).

Clear evidence of the international poverty trap can be found in the CCDCs' devastating experience in the 1980s, when real commodity prices collapsed amidst the sharp recession of the world economy following contractionary macroeconomic adjustments to major industrial economies (see Figure 1.1 above). Drawing a parallel between the depth of the crisis faced by these countries in the 1980s and the Great Depression of the 1930s, Maizels (1992) demonstrated the severity of the 'commodity' crisis and convincingly exposed how the beginning of the debt crisis of commodity-dependent poor countries in the early 1980s coincided with the 'conveniently forgotten' commodity crisis. The collapse of commodity prices in the 1980s translated into a loss of real purchasing power of 40–60% for CDDCs – a deeper crisis than they faced during the Great Depression. Unfortunately, the IFIs largely ignored Maizels' in-depth and comprehensive analysis of commodity issues and his call for correct international policy responses to the debt crisis, which would have led to an early resolution of the protracted debt in LICs.

The persistent reluctance during the 1980s and 1990s on the part of the IFIs and donors belonging to the Paris Club to acknowledge commodity-related development issues as one of the main causes of the debt crisis, and the failure to address such issues effectively in a timely fashion at the global level, has been extremely costly in terms of forgone development in CDDCs.⁷ This is particularly severe in SSA countries, most of which were later classified as Heavily Indebted Poor Countries (HIPC). None of the debt-relief mechanisms employed since the outbreak of the debt crisis, including the HIPC initiatives established in the late 1990s, paid sufficient attention to problems arising from their dependence on commodity exports, with their loss of international purchasing power and with it the capacity to service external debt. The resolution of the protracted debt crisis had to wait until 2005 for comprehensive debt cancellation embedded in the Multilateral Debt Relief Initiative (MDRI) (Nissanke, 2010a, c).

The way in which the international donor community managed the debt crisis aggravated the commodity-dependence trap inherited from the colonial era. Economic policies recommended by the IFIs, via the Washington and Post-Washington Consensus, did little to facilitate the process of structural transformation and diversification of their economies through rigorous productive and social investment. On the macroeconomic stabilisation front, the demand management of commodity-dependent economies governed by external shocks should be counter-cyclical to commodity price movements. Yet, at the time of an externally induced BoP crisis accompanied by a sharp drop in domestic demand, these countries were forced, in the absence of alternative financial facilities, to adopt the International Monetary Fund (IMF)-sponsored pro-cyclical stabilisation programme to further contract aggregate domestic demand.⁸

The low-equilibrium trap of high debt and low growth was particularly evident in CDDCs in SSA throughout the 1980s and 1990s.⁹ With the debt crisis, a repeated dose of large-scale fiscal retrenchment, which was a part of policy conditionality with Structural Adjustment Loans in the 1980s, reduced spending on public goods. Governments were generally left with little capacity and declining resources to pursue domestic development-oriented policies or to make sustained public investment. Typically, large-scale infrastructure projects are the first to be axed in times of crisis. In reality, the fiscal retrenchment at the height of the debt crisis in the 1980s was so deep that expenditure on essential public goods such as basic education and health was also axed. It was assumed that these services could be provided on a fee-paying basis. This has often resulted in fragile states with seriously depleted and impaired institutional capacity to provide social services

⁷ This is despite of notable efforts by UNCTAD and other UN agencies to draw attention to the commodity-related development problems (see, for example, UNCTAD, 2002 and 2003).

⁸ See Nissanke (1993 and 2010b) for a critical review of macroeconomic adjustment policies over the commodity price cycles in mineral-based developing countries.

⁹ This is in notable contrast to the earlier resolution of the debt crisis of middle-income countries (MICs) via market-based mechanisms initiated by the Brady Plan. Although many emerging economies have subsequently faced repeated financial crises due mainly to full-blown liberalisation of the capital account, some large resource-rich MICs have become 'commodity developers'.

and to build physical and social infrastructure. Inevitably, the scope and quality of public services and infrastructure progressively deteriorated.¹⁰

In particular, the eroded capacity of highly indebted governments to undertake public investment meant that they could not promote and crowd-in private investment. The low level of public and private investment severely damaged economic growth and development. In the absence of the reliable provision of public goods, economic transactions in many CDDCs are conducted in highly uncertain and risky environments, which engender volatile returns on investment and income. If left unattended, the degree of uncertainty and instability deters private investment and economic growth and affects the composition of investment in favour of reversible and safe investments that have a self-insurance character. This means that safe and liquid assets are systematically chosen over less liquid but high-yielding assets. While the wealthy could invest abroad, resulting in substantial capital flight, other investors placed their capital in short-term assets in sectors with relatively lower sunk costs and shorter turnover periods, such as trading, rather than in long-term productive investment projects.

These conditions persisted throughout the 1990s in most CDDCs in SSA. Such political and economic environments tend to keep out a significant proportion of private agents from the 'official' economy. The so-called fragile informal economy then becomes an important source of employment and income. In the absence of functioning formal institutions, economic activities tend to be restricted to small-scale production and local trade to obviate the contract-enforcement problem through repeated dealing as well as the cultural and social homogeneity assured within a confined geographical proximity. The majority of the poor, particularly the rural poor, are left behind. At the same time, a largely informal economy with a weak and narrow tax base reinforces fiscal fragility.

Thus, the poor provision of public goods and the fragile fiscal conditions stemming from commodity dependence complete a vicious circle generating impediments to the effective use of commodity income for development and condemning these economies to a low-development trap. The debt crisis, which more or less stalled development progress over two decades, demonstrates the macroeconomic mechanisms of the commodity-dependence trap at work, leaving these economies with little domestic resilience to price shocks and seriously hampering any structural transformation of their economies. Given the significance now attributed to globalisation and free trade as positive forces for development, we would note that it is impossible to address the problems of commodity dependence by pursuing a free-trade agenda unless it is also accompanied by appropriate global and national policies and actions to tackle the causes of CDDCs' fragility and vulnerability. As discussed earlier, countries that rely on commodities for participation in the global economic system experience negative feedbacks caused by multiple factors that cannot be addressed simply by enhancing their access to global markets.

¹⁰ In parallel, there was a steady reduction of the proportion of ODA spent on economic infrastructure projects or to social infrastructure in SSA in the 1980s and 1990s. For the main reasons behind this trend, which has resulted in a significant infrastructure deficit in the region, see Nissanke (2010c, d).

3. Recent Changes in Agricultural Commodity Sectors in CDDCs

3.1 Institutional environments affecting smallholders in global commodity value chains¹¹

The ways in which commodity production and trade are conducted have changed significantly in a globalised context. One such change is the intensified process of market consolidation along commodity supply chains at the *global level*. Today, TNCs can largely dictate the patterns of international trade through intra-firm trade within their globally integrated production and marketing strategy. TNCs' activities are strategically organised and integrated either horizontally or vertically, which is reflected in their dominance in commodity value chains.

In agricultural commodity production and marketing, there are considerable asymmetries in market power and access to information, technology and marketing know-how between TNCs and local entrepreneurs, farmers and traders in developing countries. Ironically, for small-scale producers and their governments, domestic agricultural commodity production and marketing have become fragmented, as TNCs have hastened integration into their global operations. This parallel process of fragmentation and integration often results in a hugely skewed distribution of gains from commodity trade. In the prevailing market structures, the potential benefits of improved productivity can be largely appropriated by TNCs and global supermarket chains, rather than going to producers and farmers. The governance structures of primary commodity value chains have become increasingly buyer-driven with a shift in the distribution of value towards consuming countries.¹²

At the national level too, there have been significant changes in the institutional environments for producers and farmers engaged in agricultural primary commodity sectors. For example, the waves of domestic market and trade liberalisation/deregulation transformed arrangements for the production and marketing of agricultural commodities, including cash crops such as cotton and coffee. Most state marketing boards were dismantled or downsized, and domestic price-stabilisation funds or mechanisms ceased to exist. Domestic commodity traders and producers are now exposed to greater risks as highly volatile prices are directly transmitted through the international marketing system to small traders and producers.

Moreover, with the withdrawal of government support, farmers engaged in commodity production lack stable and guaranteed access to inputs such as seeds, fertiliser and new technology. The institutional vacuum is supposed to be filled by private agents and traders. This has often resulted in geographical fragmentation of marketing activities, and weakened the position of smallholders in relation to private traders, many of whom act as TNC agents, both providing inputs and marketing their produce. In the process, producers have become spatially fragmented and isolated both between and within villages.¹³ They are often paid a tiny fraction of the prices posted in world commodity exchanges. While producers are increasingly exposed to the vagaries of global market forces they are poorly equipped to deal with price and other marketing risks.

An increasing number of farmers and smallholders now engage in agricultural production and marketing as out-growers or via contract farming.¹⁴ Given their informational disadvantages, while they may be guaranteed better access to agricultural inputs through contract farming, farmers and smallholders are often

¹¹ See Nissanke (2010b) for detailed discussion on this topic with reference to Tanzania, Uganda and Zambia.

¹² See Gereffi et al. (2005) and Kean (2012) for discussion on changing governance structures in the global value chains under globalisation.

¹³ See Bargawi (2009) for discussion of how cotton and coffee producers have experienced fragmentation between and within villages in Tanzania over the last two decades.

¹⁴ See Oya (2012) for a survey of contract farming arrangements in Africa.

tied to unfavourable contract terms, which are geared to the interests of agricultural corporations or global supermarket chains. Furthermore, smallholders and farmers in LICs who cultivate food and cash crops are reportedly being squeezed out of access to productive assets such as fertile farmlands, water or other resources in the wave of 'land grabbing' by international investors (IIED, 2010; FIAN International, 2010). Not only are large US and European corporations and financial investors investing for huge financial gains as the price of grains and biofuels rises, but sovereign investors from the Middle East and Asia are leasing or buying large areas of farmland to address their own food shortages and insecurity through aggressive 'land grabs' in LICs such as Ethiopia, Sudan, Mozambique or Cambodia.

Such trends points to the need to strengthen local institutions to protect the rural poor and smallholders from disadvantageous deals, including outright abuse and manipulation of their land rights. Weak political institutions are one of the manifestations of structural vulnerability of fragile LICs, which are often exploited by outsiders. As always, the rural poor, i.e. smallholders engaged in subsistence farming, often without official land titles, are most at risk from these disturbing trends, fast losing their access to productive assets. Over time, the accelerating trend in large-scale land acquisitions will affect the host country's system of agricultural production. Given the negative ecological impacts of climate change, if left unchecked, this situation will eventually threaten the food security of these fragile LICs.

3.2 Are market-based instruments effective as risk hedging for producers?

The collapse of the International Commodity Agreements (ICAs) to stabilise commodity prices through managing buffer stocks or export quota as envisaged in the 1980s did not lead to a new international consensus on how to counteract highly volatile markets.¹⁵ Rather, the absence of agreed alternative international mechanisms and instruments seemed to provide the global community a justification for complacency, regarding such mechanisms and instruments as unnecessary. Rather, the focus was on enhancing primary producers' access to market-based risk-management instruments so that markets could work without undue interference.

Thus, with the collapse of the ICAs, donors advocated market mechanisms for managing commodity price risks and for dealing with risks stemming from large price volatility and the resulting income shocks in CDDCs. The IFIs encouraged primary producers to use market-based commodity-linked financial risk-hedging instruments by participating in futures and derivative markets as an effective mechanism to manage price risks. However, as will be discussed in Sections 5 and 6, international commodity markets do not always operate efficiently and in continuity to enable stakeholders in physical commodities to obtain effective and reliable risk protection. This is particularly true when markets are characterised by high volatility and financial investors pursue high-risk premiums as 'noise traders'. In such 'turbulent' market conditions, the self-regulating capacity of markets cannot guarantee the efficiency required for risk-hedging purposes.

In reality, the use of financial instruments for hedging risks is both costly and ineffective for the CDDCs, not only at the macro level as counter-cyclical management but also at the micro level for farmers and associations of producers and traders. Market-based financial instruments are often imperfect in reducing and hedging price risks even for large operators, let alone for small producers. Issues such as high transaction and financial costs, skewed access to information and high technical barriers make it hard for such risk-hedging mechanisms to apply universally, particularly for small producers. Further, at the local level, since it is difficult to create a regulatory oversight agency required for liquid, functioning markets in a short timescale, local farmers and traders are forced to use international intermediaries or branches and subsidiaries of TNCs in order to access these instruments and the technical expertise required, which further pushes up the cost of hedging, as reported in a CFC-commissioned study based on its pilot scheme (See Box 3.1).

¹⁵ See Nissanke (2010a) and key references therein for reasons behind the collapse of the ICAs.

Box 3.1 CFC Pilot Price Risk Management Scheme for Cocoa Farmers

A CFC-commissioned study (Zant, 2009) reports the outcome of the Pilot Price Risk Management Scheme for Cocoa Farmers' cooperatives in Côte d'Ivoire, which experimented with an application of put options and participatory options (POPs) for hedging cocoa price risk in the 2007–2008 crop season. In Côte d'Ivoire, as in other countries in SSA, the IFI-sponsored market liberalisation measures in the 1990s included dismantling price-stabilisation schemes and price-support programmes in the cocoa sector. This resulted in more direct transmission of increasingly unstable international prices to cocoa farmers. In this high-risk environment, four cooperatives and farmers' associations selected for the pilot study were urged to use 'option' instruments that were supposed to provide them with a floor price against large fluctuations in international futures exchanges. These four cooperatives were relatively large, rich, well organised and well managed.

Initially, they were promised that the application of a POP 'option' – a combination of purchase of put option and sale of a call option at different strike prices – would allow them to reduce the risk of falling prices to guarantee steady income and hence to make more efficient production plans with less uncertainty on crop revenue. However, since costs of the POP are contingent on market developments and due in the course of the hedge, cooperatives found it hard to manage unpredictable variable hedging costs. Further, Cargill, the international trader acting as an intermediary in this pilot scheme, was unwilling to bear the credit risk of the participating cooperatives in a POP option. Hence, the POP option was abandoned in the middle of the pilot study, and the cooperatives were told to switch to a simple option instrument, which involved a payment of high upfront costs at the trigger price, estimated to be around 14% of farm-gate prices. In addition, the cooperatives had to pay brokerage fees per transaction. Thus, the total cost of using market-based hedging instruments was considerable. The running costs of the pilot scheme itself were also extremely high, in part because of the number of international consultants and intermediaries. As the farmers participating in the CFC pilot schemes remarked, while market-based price-risk management might be a feasible mechanism for mitigating price-related vulnerability, it offered no 'silver bullet' solution.

The CFC pilot project on cocoa price risk management presented in Box 3.1 confirms that hedging risks using financial instruments proved difficult and costly. Given this outcome, in its evaluation of the pilot scheme the CFC (2010) concluded that given the complex nature of financial markets, it would probably not be productive to try to turn cocoa producers into successful players in commodity derivatives. In keeping with the competitive advantage arguments, they should focus on mastering a set of proven risk-mitigation strategies, selected on the basis of their practical effectiveness, robustness and simplicity. Such strategies should take account farmers' exposure to market risk such as: (a) limited bargaining power, which might transfer the accumulated risks of the value chain to the farmer; (b) disparities, imperfections, asymmetries and liquidity constraints affecting the relationship between physical and financial markets; (c) competitive pressures, passing the effects of volatility to the weakest producers; and (d) negative effects of poor information infrastructure, weak institutions and limited access to finance on competitive terms.

In addition, as part of the decisions involved in managing their income effectively, farmers need to understand the difference between insurance and price-risk management and their related costs and benefits. Insurance products should offer relatively inexpensive protection against relatively rare but catastrophic loss of farm income. Price-risk management would target regular payments to and from the farmer to secure a relatively stable income. Due to the high frequency of transactions, price-risk management would tend to be costlier than insurance, but might be preferred if it facilitated access to finance. However, basis risk remains the serious weakness of any risk-management schemes based in remote markets. While the average disparity between farm-gate and market-traded prices may not always be exceptionally large, market discontinuities and liquidity constraints mean that there is a risk that this disparity could rise in times of crisis, i.e. when insurance is most needed. Because of the possibility of increasing basis risk at the time of heightened

volatility, the effectiveness and efficiency of risk-management products based in remote markets may be lower than expected. In this regard, the prospects of the emergence of sufficiently liquid regional markets have been discussed extensively. While such bourses would be a very positive development for liquidity, transparency and efficiency of regional markets, the viability of current efforts to set up exchange-based trading remains untested. It has been suggested that regional bourses face a near impossible task in attracting sufficient volumes and liquidity. After all, the problem of the vulnerability of commodity producers to market volatility needs to be addressed throughout the value chain for the measures to be effective.

Donors have increasingly supported pilot schemes to encourage farmers and producers to use market-based mechanisms such as micro-insurance, microcredit or financial risk-hedging instruments. However, without a substantial dose of subsidies and promotion efforts on the part of donors and non-governmental organisations (NGOs), these market-based mechanisms and instruments are unsustainable. Ultimately, risk-management schemes and supporting institutions depend on the government's overall policy framework. Thus, governments should make the fundamental decisions on policies to support price-risk management for producers as part of their socioeconomic development strategies. Price-risk mitigation would need to be applied in the context of understanding the total risks farmers are facing. For small farmers and producers a spell of hunger can destroy a lifetime of hard work. For this reason it is important to have an arsenal of policy instruments and mechanisms to prevent periods of market instability from becoming full-blown crises for the poor and vulnerable.

4. Critical Evaluation of EU's ACP Agricultural Commodity Programmes and Action Plan

4.1 The framework of EU action

The proposal for an EU-coordinated action plan was made in a Communication in 2004 (EU, 2004) and linked commodity dependence and commodity value chains as the foundations of action to address poverty in CDDCs. The core argument for this approach referred to the EC staff working document (EU, 2003), which discusses specific challenges facing CDDCs and their specific needs, as well as possible coping strategies in those countries.

The challenges were identified as: (a) long-term declining price trends; (b) short-term price volatility; (c) international market concentration and integration; (d) market reforms in producing countries; and (e) the over-dependence on traditional primary commodities, such as coffee, cocoa, cotton, bananas and sugar. The evaluation report (ADE, 2012) identified six areas where actions corresponded to the challenges facing CDDCs:

- treating commodity chains and dependence as priority issues for reducing poverty
- coping with the long-term decline in commodity prices
- managing commodity risks and providing access to finance
- diversifying production around traditional commodities
- promoting integration in the international trading system
- encouraging sustainable business and investment practice in CDDCs.

The proposals in the Action Plan were set against the context of prolonged period of declining prices of most of the agricultural commodities important for the CDDCs. The Programme emphasised trade as the pillar of inclusive global economic growth leading to the sustained reduction of poverty. In particular, the staff working document identified declining incomes from the commodity sectors of CDDCs as the link between commodity dependence and poverty. Viewed in the context of our discussion in Section 2.3, although declining incomes from the commodity sector represent one of many possible manifestations of commodity-related vulnerability, this is the one that has come to the fore in the period of declining commodity prices in the 1997–2002 period.

In the light of the discussion in Section 2, it is also relevant that the staff working document recognises that ‘...commodities still are the major source of employment, income and export earning in many developing countries, and as such remain an important vehicle for developing modern economies’. It emphasises that traditional commodity activities cannot remain the sole basis for successful economic development, and points to the need ‘... to reduce vulnerability both at individual and at the national level’. Although not making the point explicitly, the document contains the key elements of an understanding of commodity dependence as vulnerability.

4.2 The All-ACP Agricultural Commodities Programme

The Action Plan resulted in the adoption of the EU–ACP Agricultural Commodities Programme, known as the A3CP (All-ACP Agricultural Commodities Programme). (See Annex 1 for more details on the programme.)¹⁶ Given its design and implementation, we believe the A3CP faced two basic problems that would be relevant to any similar initiative:

1. Identification of priority commodities, sectors, regions and countries requiring programme-sponsored interventions.
2. Timely evaluation of the impact of individual activities, and collating their effects into the assessment of the programme's overall impact.

The first of the two arises from the lack of an agreed measure of commodity-related vulnerability and commodity dependence. This was addressed by designing an elaborate and inclusive process for identifying priority actions for support, and creating a dedicated Coordinating Unit (CU) to facilitate the information flow among participants. The practical difficulties of setting up an appropriate decision-making process within a group, known in the management literature as group dynamics and process-outcome coordination (e.g. Schaefer and Crichlow, 2002), were not specifically addressed. It was effectively postulated that a legitimate and inclusive process in selecting priority activities was sufficient to secure the reasonable allocation of funds and to meet the programme's objectives.

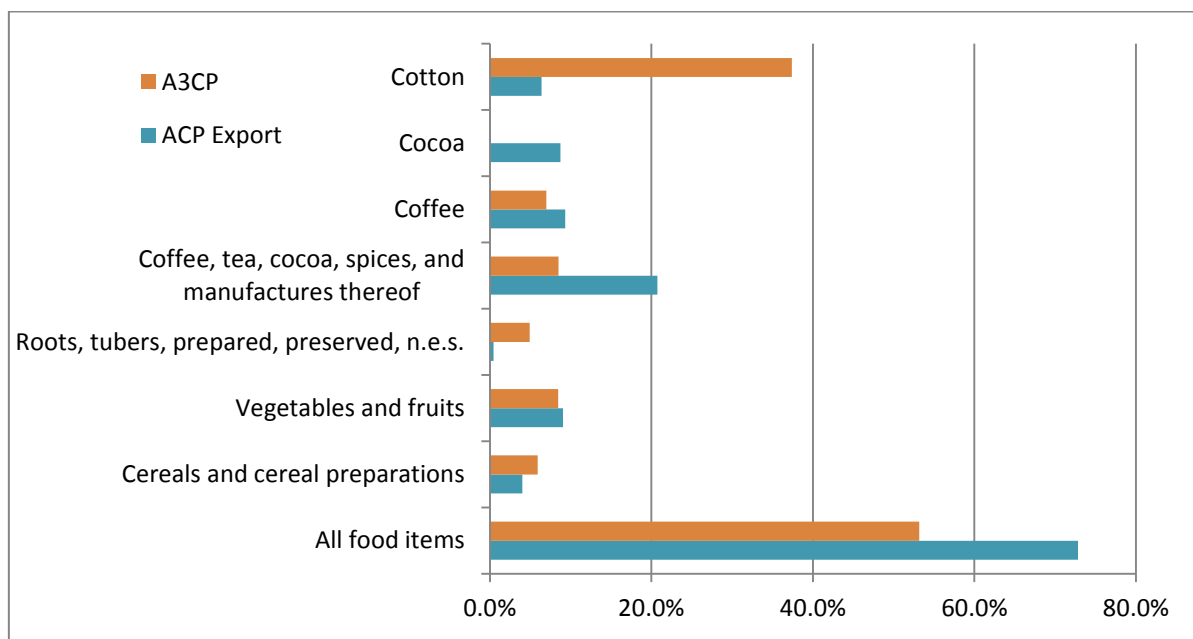
The second difficulty was addressed by formulating a detailed work plan and list of material 'deliverables' for each of the activities supported. Many of these deliverables under Result 1, and some under Results 2 and 3,¹⁷ amounted to translating *financial inputs* into *knowledge inputs* from the participating international organisations (IOs). These knowledge inputs, such as strategies and sector-development recommendations, are reported as 'deliverables'. Their impact in terms of the overall goals does not much feature in the Programme reports. We recognise the inherent difficulty of measuring the impact of knowledge-based development programmes, and that the issue was the subject of much research that has yet to result in a definitive positive recommendation. It is also important to recognise that in this instance the Programme did not have the benefit of feedback from the final results, which could otherwise have been used to correct any deficiencies in the process of establishing priorities.

The eventual allocation of funds can be considered legitimate in the sense that it was discussed and agreed by all parties. Comparing the shares of resources of A3CP allocated to some of the commodities for which trade statistics are available, with the exception of cotton, cocoa and root crops, the allocation is also fairly consistent with export shares of commodities in ACP countries.

¹⁶ See also CFC (2012), ITC (2009, 2010, 2010a, 2012), FAO (2012), UNCTAD (2012), WB-ARMT (2012) and WB-SDN (2012).

¹⁷ Result 1: Development of strategies. Result 2: Strategy Implementation: Improved access to production factors, markets and services. Result 3: Improved access to market-based risk management.

Figure 4.1 A3CP allocation vs shares of individual commodities in combined exports of food and agricultural non-food items



Source: A3CP, UNCTAD Commodity statistics 2010

It may be further noted that in the ACP countries the export share of root crops does not reflect their true significance since most are grown for domestic consumption. Recalling that the allocation for cotton was made in the context of a wider Cotton Partnership, and adaptation to the WTO, cocoa remains the only significant commodity that is out of balance in the A3CP compared to its economic role in ACP countries.

4.3 Drawing lessons from A3CP for future action

4.3.1 The meaning of a strategic approach

Reflecting on the outcomes of the A3CP, and the comments made by different parties, a number of observations appear relevant.

First is the need to review the practical meaning of a strategic approach.

While an open and inclusive process for identifying action priorities worked satisfactorily, its apparent deficiencies undermined its impact and significance. In particular, it appears that development strategies in the commodity sector amounted to market surveys and generic agricultural development recommendations that the IOs participating in the A3CP found lacked detail and were hard to implement. The A3CP was also criticised on the grounds that its strategic objectives were ‘poorly defined’ (UNCTAD, 2012), and on the need for a commodity supply chain risk assessment (World Bank, 2012a).

Programmes to promote a commodity-sector development strategy should include goals, instruments and exit strategies. Furthermore, a workable strategy is inseparable from establishing clear indicators of the effectiveness of a given instrument in terms of progress towards the overall goals. Based on our interpretation of commodity dependence as vulnerability-driven negative feedback, an effective commodity-sector development strategy depends on a corresponding feedback mechanism continuously assessing and filtering the impact of available interventions and instruments. Bringing together these and other comments on prioritisation, it appears that an approach based on agreed indicators of commodity-related vulnerability could offer an effective practical solution.

In this connection, an external evaluation of EU policies on commodities (ADE, 2012) recommended that support to agricultural commodities focus on competitiveness and livelihood possibilities, and address commodity dependence through diversification. While it may be agreed that the recommendation is likely to be empirically accurate, its implementation in practice does not appear feasible. Because commodity markets are large and highly competitive, the sustained impact of an intervention targeting competitiveness in a given country would be the result of the interaction of diverse market forces. The outcomes of an intervention in a country facing negative feedback due to its commodity-related vulnerability would be uncertain and hard to attribute. For this reason, we believe that focusing interventions on the basis of *ex-ante perceived* competitiveness opportunities would not significantly improve the outcomes, which are the result of interplay of multiple competing market forces. At the same time, such a focus would probably overlook innovation opportunities in less developed sectors, where opportunities for sustained growth might be greater. This is partially confirmed by the experience of the A3CP, where well developed strategies focused on promising growth opportunities were still difficult to implement.

As indicated above, an alternative would be to recognise that commodity markets always look for new income opportunities and to focus on interventions to prevent the emergence of vulnerabilities associated with rapid changes in commodity-generated incomes. Such an approach would have the combined advantages of leveraging the power of commodity markets while addressing the underlying causes of commodity dependence.

4.3.2 Common evaluation framework based on reduction of commodity-related vulnerability

One weakness of (or reason for adopting) the process approach to identify priority interventions concerns the lack of a common evaluation framework unifying activities as steps towards resolving the problems created by commodity dependence. The multitude of problems and issues related to commodities across the ACP countries necessarily leads to the fragmentation of individual initiatives. For example, interventions to promote fruit and vegetable production in the Caribbean or Pacific would be unlikely to meet the needs of coffee growers in Eastern Africa. In the absence of a common measure of the impact of interventions in different commodities and in different parts of the world, linked to a common conceptual core, implementation appeared ‘diffuse’, as observed in the mid-term review.

The same difficulty applies to measuring and comparing the impact of individual activities. There were broadly three types of activity aimed at the primary commodity producers, each with different impact indicators:

- Result 1: strategy development. The impact of strategy development was expressed in the number of strategies prepared via an inclusive process with stakeholder participation. There were further references to the adoption and inclusion of strategies in national development plans.
- Result 2: agricultural productivity and quality development. The impact of these activities was expressed in the number of primary commodity producers involved and the scale of activities. The impact evaluations included estimates of added value and increased income from activities where such assessment was feasible.
- Result 3: risk management and mitigation. The impact of risk-related activities was expressed in the extent of awareness-raising and capacity-building initiatives, including the number of meetings, publications and primary producers participating in the events.

In view of the tight timeframe of the A3CP, the IOs noted the difficulties in bridging activities under the three result areas, which meant that the overall impact indicators essentially remained a combination of the three heterogeneous groups. This complicates the process of learning and feedback across the A3CP and from the A3CP to future activities, because achievements under Results 2 and 3 are detached from the strategies developed under Result 1.

Overcoming this fragmentation requires a clear and commonly applied identification of activities that contribute to achieving the overall goal. Such indicators of commodity dependence could be developed on the basis of understanding it as specific kind of economic vulnerability. A comparable measure of the effectiveness of individual actions would allow the programme to adapt to the practicalities of implementation and direct resources towards actions that prove to be more effective. At the same time, there should be a mechanism for analysing and learning from mistakes, so that activities not contributing to the overall goals can be identified promptly and revised or suspended. Importantly, in order to be true to its strategic foundations, any future programme needs to be sufficiently persistent in pursuing its goals within a realistic timeframe so that the learning process and adjustment of activities can be achieved within the framework of the same goals.

4.3.3 Communication and information management

The A3CP recognised improved collaboration between the participating organisations as one of its core results. While the role of the CU in facilitating this process was generally praised, it was also noted that the A3CP did not leverage the full power of the EU presence in ACP countries, e.g. through Country Delegations and the extensive network of contacts and bilateral cooperation agreements. A multi-country initiative to address the issues of commodity dependence has to manage a multi-dimensional flow of information to enable it to be integrated with other development programmes. Given the number of development programmes in commodity-dependent countries, the coordination of all initiatives to address the root causes of commodity dependence would lead to clearer and more sustainable impact, so that the whole would be greater than the sum of the parts.

4.4 Implications for the EU Raw Materials Initiative

Another significant milestone in EU policy towards commodities was the Raw Materials Initiative (RMI) (EU, 2008) aimed at securing physical supplies of critical raw materials. The apparent change of tack from a development focus on commodities to securing their supplies seems to be a direct response to market developments between 2004 and 2008, which saw a sustained commodity price boom, as shown in Section 1. The apparent change of strategic focus of interventions in the commodity sector reflects the continued search for a sustainable commodity strategy. The RMI focuses on 14 critical mineral commodities, where the policy towards third countries is aimed at securing a ‘level playing field’ in access to raw materials.

The characterisation of the RMI goes beyond the scope of this paper (for more detail, see Annex 2). All we would say here is that the policy of ‘ensuring a level playing field’ towards developing countries in securing uninterrupted access to raw materials *presupposes* that current global trade system offers both fair access and equitable distribution of the benefits from trade to all participants. If this were the case, the focus of RMI on ‘raw materials diplomacy’, targeting human rights, good governance, conflict-resolution, non-proliferation and regional stability could be justified.

However, as discussed earlier, reliance on commodities for participation in global trade carries with it a range of economic vulnerabilities, resulting in a disproportionate share of the costs of inefficiencies being borne by the primary producers. For this reason, CDDCs are unlikely to meet their development objectives by focusing only on strengthening their participation in the global trading system, and so would not benefit from ‘level playing field’ policies. In view of vulnerabilities related to reliance on commodities for international trade, at the times of greatest market disruptions, such as the commodity price crisis of 2008, CDDC governments would have a strong incentive to restrict the operations of the free market in commodities. Consequently, the RMI policies have to take into account that CDDCs might take steps to mitigate their vulnerability. A practical approach for the RMI, given its strategic outlook, would be to mitigate the commodity-related vulnerability of third countries in order to avert disruptions to trade.

In conclusion, it is difficult as yet to reach a definitive assessment of how the A3CP has contributed to addressing the mechanisms underlying commodity dependence as explained in Section 2. It is also unclear whether it has managed to resolve a number of critical institutional constraints and weaknesses facing commodity producers and farmers (noted in Section 3.1) in a country's overall agricultural policy framework. Nor is it easy to ascertain how successful the A3CP has been in addressing commodity producers' vulnerability through the risk-mitigating schemes, or whether sufficient attention was paid to strengthening producers' negotiating positions vis-à-vis traders acting for TNCs in commodity value chains, through improved access to market information or technology.

At the same time, we should note that some commodity-producing countries such as Kenya, Ethiopia and Zambia have become important exporters of non-traditional agricultural crops such as horticulture and cut flowers destined to EU markets. The experiences of diversification from traditional export crops should be studied, as this could contribute both to building the resilience of producers and of a commodity-producing country at the macro level. Such studies will be instructive for the design of future programmes that place greater focus on innovation and creation of new centres of economic growth in the commodity sector. However, translating the potential of non-traditional exports into enhanced resilience depends critically on whether producers can secure a fair share of returns in global value chains. Also, the disproportionate expansion of alternative export commodities could create exposure to new volatile markets, which needs to be managed in the context of reducing overall economic vulnerability.

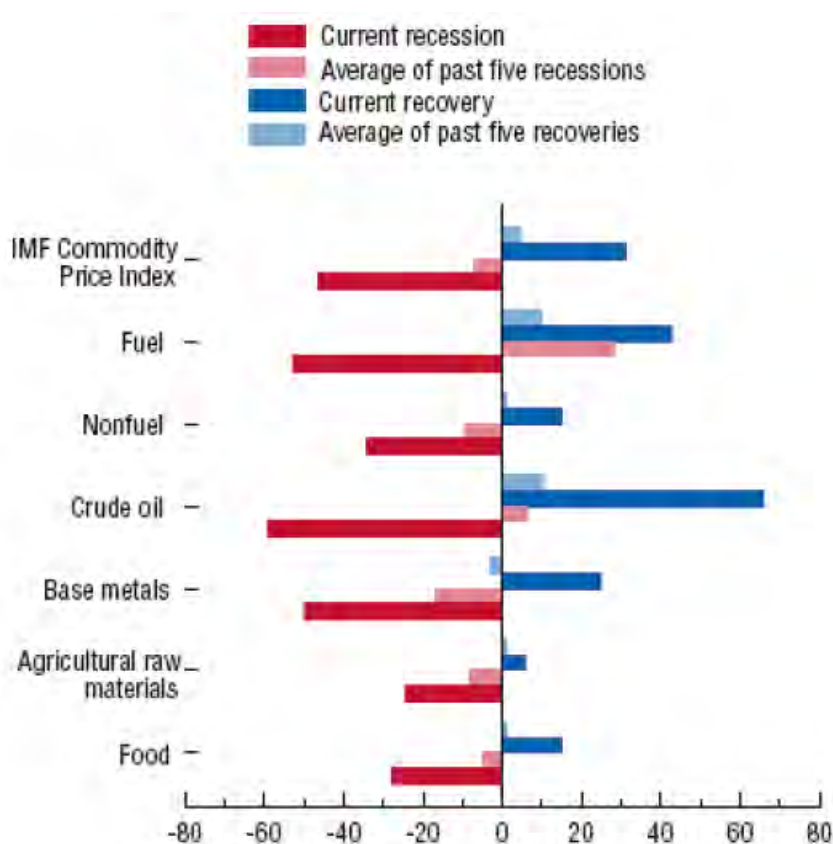
5. Recent Price Dynamics in World Commodity Exchanges¹⁸

5.1 Unprecedented swings and continued high volatility of commodity prices

As discussed in Section 1, commodity prices have experienced extreme swings over the past decade. The increases began to gather pace first in 2002–2003 and then in 2006–2007, culminating in the all-time peak in early to mid-2008 across commodities. The earlier boom had lasted for nearly six years, which was longer and stronger than any other boom in the last century. However, as the unprecedented turmoil and meltdown in financial centres worldwide, and pessimism about the prospects for the world economy started dominating in September 2008, prices across commodities plummeted sharply.

Commodity prices began to recover some of the lost ground in the second quarter of 2009, while the global economy was still in a deep recession. An IMF report observed that the recovery in commodity prices has been faster in the current economic cycle than in the previous ones, while the fall in prices was by far the steepest compared to the previous five recessions across commodities, as shown in Table 5.1 and Figure 5.1 below. High price volatility resurfaced in 2010 and a fear of another global food crisis loomed again in early 2011, when several commodity prices reached another hike, followed by softening prices in the global economic slowdown amidst the euro zone debt and financial crisis since then.

Figure 5.1 Commodity Prices in Global Recessions and Recoveries: A comparison of the episode of 2007-9 and previous recession and recovery cycles (Percentage change indices, 2005=100)



Source: IMF (2009, Figure 1.17)

¹⁸ This section is largely drawn on Nissanke (2012).

Table 5.1 Commodity Price Developments, 2008-9

| | Percent Change | | |
|----------------------------|----------------|----------------|-----------------|
| | Peak to trough | Trough to June | 2009:Q2/2009:Q1 |
| IMF Commodity Price Index | -55.6 | 31.1 | 15.7 |
| Fuel | -64.1 | 42.7 | 20.1 |
| Petroleum | -68.7 | 66.4 | 33.8 |
| Nonfuel | -35.5 | 17.5 | 9.5 |
| Base metals | -49.6 | 24.5 | 15.1 |
| Agricultural raw materials | -33.0 | 13.6 | 0.7 |
| Food | -33.4 | 19.6 | 10.2 |

Source: IMF Primary Commodity Price database

Source: IMF (2009; Table 1.2)

There is growing evidence that the unprecedented magnitude of swings and excessive volatility in commodity prices over the past decade reflect the increasing linkages between activities in commodity and financial markets. Through this process of financialisation of commodity markets, the volatility in commodity markets and financial markets feed on each other and constitute an inbuilt mechanism of destabilisation and uncertainty in the world economy. In this regard, the simultaneous appearance of severe strains in both commodity and financial markets in 2007–2009 cannot be viewed as a mere coincidence. The continued price volatility across commodities has undoubtedly been a major source of instability to the world economy and made it all the more difficult to ride the global financial crisis of 2007–2009 and to secure a robust recovery worldwide. The highly unstable commodity prices over the past decade have also had profound impacts on the course of economic development of CDDCs. Since prices governing international trade are determined in world commodity exchanges, it is critical to examine factors behind the recent dynamics before discussing appropriate policy responses to counteract any negative development impacts. Hence, we shall now examine the recent heightened volatility of commodity prices as resulting from two interrelated phenomena: (a) structural changes affecting demand–supply fundamentals; and (b) the increasing finalisation of commodity markets.

5.2 Changing market fundamentals over the last decade

The synchronisation of sharp increases in commodity prices in 2002–2008 and in 2009–2011 suggests that common factors may be responsible. It is widely accepted that the recent price increases and dynamics over the *medium term* reflect the profound changes in fundamental demand–supply relationships affecting many commodities simultaneously. Whereas the earlier price cycles were typically triggered by supply shocks, the recent structural changes are on the demand side, mainly from the ‘Asian drivers’. For example, the sharp increase in the price of mineral and metals is driven by demand from newly industrialising economies, in particular China and India, due to intensive use of these materials for their industrialisation, construction of physical infrastructure and urbanisation trends (Kaplinsky, 2010).

Similarly, there has been a steady increase in demand for agricultural products from emerging economies, with a time lag of a few years compared with that for oil, minerals and metals. Substantial increases and changing patterns in food consumption as per capita income rises have turned these countries into substantial net importers of agricultural products. For example, China is now a significant net importer of agricultural products, including grains, soya beans and vegetable oils as well as raw materials such as cotton and rubber. This contributed to the steep rise in the prices of foods and other agricultural raw materials on world markets in 2007–2008.

There are common threads on the supply side too. Minerals, metals and oils hit supply constraints in meeting the fast-growing demand, as investment in these sectors was subdued in the 1980s and 1990s due to the historically low commodity prices. Similarly, agricultural production has long been neglected, with low investment in technology and supporting infrastructure in many LICs, which were hard hit by the recent rise in world food prices (World Bank, 2007). Agricultural production in many poor countries also suffered the institutional vacuum created by the economic reforms of the 1980s and 1990s, as discussed in Section 3.1 above.¹⁹

A common observation can also be made with regard to inventory/stock management. For example, the sharp price increases for major food crops in 2007–2008 took place in the context of very low world stocks for major crops such as wheat, maize and rice (UNCTAD, 2008a). Many governments ran down grain stocks in the period preceding the food crisis in order to reduce storage costs. Similarly, inventories were running low when the sharp rise in metal prices took place in 2005–2007.

There are also close linkages between oil prices and agricultural and other commodity prices because of the higher costs of associated transport and other inputs for production and marketing. The high correlation between metal prices and energy prices is due to energy-intensive technology used in both mineral production/extraction and the metal sector. At the same time there is a link between the rise of oil and food prices in the recent episode (e.g. Busse et al. (2011) demonstrate the correlation between energy and rapeseed oil prices between 1999 and 2009). The dramatic increase in food prices, which doubled between January 2006 and May 2008, is associated with the abrupt shift in arable land use from food crops to biofuels in a number of major developed economies in response to soaring fuel prices. Subsidies for converting maize to ethanol in the USA are reported to have encouraged this process. Vegetable oilseeds and oils have seen a dramatic increase as food crops. Climate change, intensified by rising fuel consumption, has also adversely affected agricultural production in many countries. Finally, policy measures such as export bans and other trade restrictions taken by several food-exporting countries at the height of the food crisis in 2008 aggravated the situation, pushing up prices of staples such as rice.

Taking into account such factors influencing fundamental demand–supply relationships, many observers concluded that most commodities had entered into a price *super-cycle* in the early 2000s. In particular, given that the recent boom is associated with more permanent shifts in demand, originating in growing Asian demand for mineral resources and agricultural products, it was argued that commodity prices would remain high until supply capacities caught up with rising investment in their extraction/production. Excess demand for agricultural products was also predicted to persist over the medium term as some supply-side factors were found to be not necessarily of a temporary nature.

With these expectations still prevalent in mid-2008, many were caught by surprise when commodity prices fell precipitously in the latter half of the year, at the onset of the deepening global financial crisis. The sharp simultaneous fall in prices across commodities was certainly a reflection of the actual and expected shift in demand–supply relationships, as a marked decline in global aggregate demand during the deep recession was seen as inevitable. In particular, investors and traders on commodity exchanges swiftly revised expectations regarding the growth prospects of emerging market economies in Asia. These countries, which were very much behind the ‘commodity boom’ of 2002–2008, now looked fragile, as they were known to be heavily dependent on world demand and trade.

Through this connection, we suggest that it was the swift change in *market sentiment* resulting from the increased uncertainty regarding the growth prospects of the world economy that contributed to the ‘free fall’ in commodity prices in the wake of the financial meltdown in September 2008. The crisis of confidence that seized the global financial system prompted investors to seek ‘safe’ investments with fast increasing liquidity

¹⁹ See Nissanke (2010b) for a detailed discussion with reference to coffee and cotton producers in Tanzania.

premiums. The resulting flight *en masse* to the ‘quality’ – highly liquid assets – by financial investors has led to deleveraging on a massive scale and a sharp drop in liquidity in other asset markets, including commodity markets, and to the subsequent collapse in world trade and economic activities. What was observed is typical of a ‘self-fulfilling’ crisis whereby agents’ expectations in assets markets create the events expected and the immediate collapse of real economic activities, as described in a number of currency crisis models (e.g. Obstfeld, 1996).

Consequent upon the combined effects of the fast turnaround in market sentiment and the anticipated reversal in supply–demand dynamics, there was a massive liquidation of long positions in commodity futures markets and the OTC deals, leading to a precipitous fall of commodity prices across the board. After huge deleveraging over two months on the part of portfolio investors, commodity prices stabilised in December 2008 and a further stockpiling of a number of strategic commodities resulted in some rebound of their prices in the first half of 2009, even though the world economy was still in a deep recession. Since mid-2009, prices of several commodities such as minerals and metals, oil and agricultural raw materials bounced back strongly, mainly due to robust recovery in demand from emerging market economies (UNCTAD, 2010).

5.3 Increasing participation of financial investors in commodity derivatives markets

While there have certainly been structural changes in market fundamentals, a question frequently raised is whether ever-increasing volatilities observed in co-movements across commodities can be explained simply by shifts in supply–demand relationships. This issue has received increasing attention because the high price volatility could result from the intensifying two-way interactions between the commodity and financial markets.

Financial investors have historically been active in holding commodities as a part of their portfolio, as Keynes (1942) observed. However, it is their increasingly prominence in commodity *derivatives* markets that has changed the way their participation influences commodity price dynamics. In particular, the fast expansion of liquid commodity derivatives has given investors ideal and cost-effective means to include commodities in their portfolios without bearing the cost of holding commodities physically, as they have to make only a small payment of margin requirements for entry – a tiny fraction of the contract value.

In this context, it should be noted that the heightened price volatility since the collapse of the International Commodity Agreements (ICA) in the late 1980s led to a rapid expansion of commodity derivatives markets, responding to greater demand from commodity stakeholders for risk-hedging instruments. The rapid growth of derivatives markets subsequently attracted new financial investors players to the trading floors, who are not engaged in the trade of physical commodities. Already in the early 1990s, there was a marked shift of speculative funds to and from commodity futures markets (Maizels, 1994). Their active participation in derivatives markets and dealings has resulted in a radical change in the structures of trading on commodity markets, altering the relationship between derivatives and physical markets.

Generally, financial investors enter commodity markets with a view to obtaining the best risk–return configuration from different assets through portfolio diversification. In particular, they can make good returns on high-volatility assets in search of high-risk premiums by speculating on volatile prices. The growth of linkages between commodity and financial markets by portfolio investors through derivatives markets and dealings, which we call the financialisation process of commodity markets, has further accelerated as commodity derivatives markets have experienced an explosive growth. Basu and Gavin (2011) advance two hypotheses for this phenomenon: (a) commodity futures offer hedging opportunities against equity risk given a *perceived* negative correlation between returns on equity and commodity futures (the Hedging Hypothesis); (b) commodity derivatives are used as a means to obtain higher yields from riskier assets when interest rates are low (the Search for Yield Hypothesis).

Indeed, there was an explosion in derivatives markets after the severe downturn in equity markets of 2000–2002 triggered by the burst of the dot.com bubble. Financial institutions and private investors operating

globally switched to commodities from equity and bond markets with the launch of commodity index funds. This trend accelerated in 2007–2008 as the crisis unfolded in European and US financial markets, and there was large-scale flight from markets in equities, bonds and housing mortgages to commodity markets.

As shown in Figure 5.2 below, there was a jump in the volume of derivatives trading and deals in 2005, culminating in the price spike in 2007–2008. This expansion was in no small measure facilitated by the deregulation of position limits previously imposed on investment banks by the US Commodity Futures Trading Commission (CFTC) in 2000. Financial institutions such as pension and hedge funds and sovereign wealth funds have become significant players in commodity markets of futures and options (UNCTAD, 2008a). As major currencies were experiencing wild swings, many commodities appeared to provide investors with a means to hedge inflation and currency fluctuations. Prices of various commodities have become highly correlated with the rising share of index trading of a bundle of commodities, in which an index is calculated according to the prices of selected commodity futures contracts comprising it (US Senate Committee Report, 2009). Commodity index traders – usually swap dealers active in OTC dealings mostly based at big investment banks – sell index funds to institutions such as hedge funds and pension funds as well as wealthy individuals who want to invest in commodity markets without actually holding any commodities.²⁰ To offset their financial exposure to changes in prices, index traders buy the futures contracts on which the index-related instruments are based. UNCTAD (2008a) reports that the investment in commodity *indices* surged from less than US\$13 billion at the end of 2003 to US\$260 billion in 2008, constituting about a quarter to one third of the notional amounts of commodity futures at the time (Figure 5.3).²¹

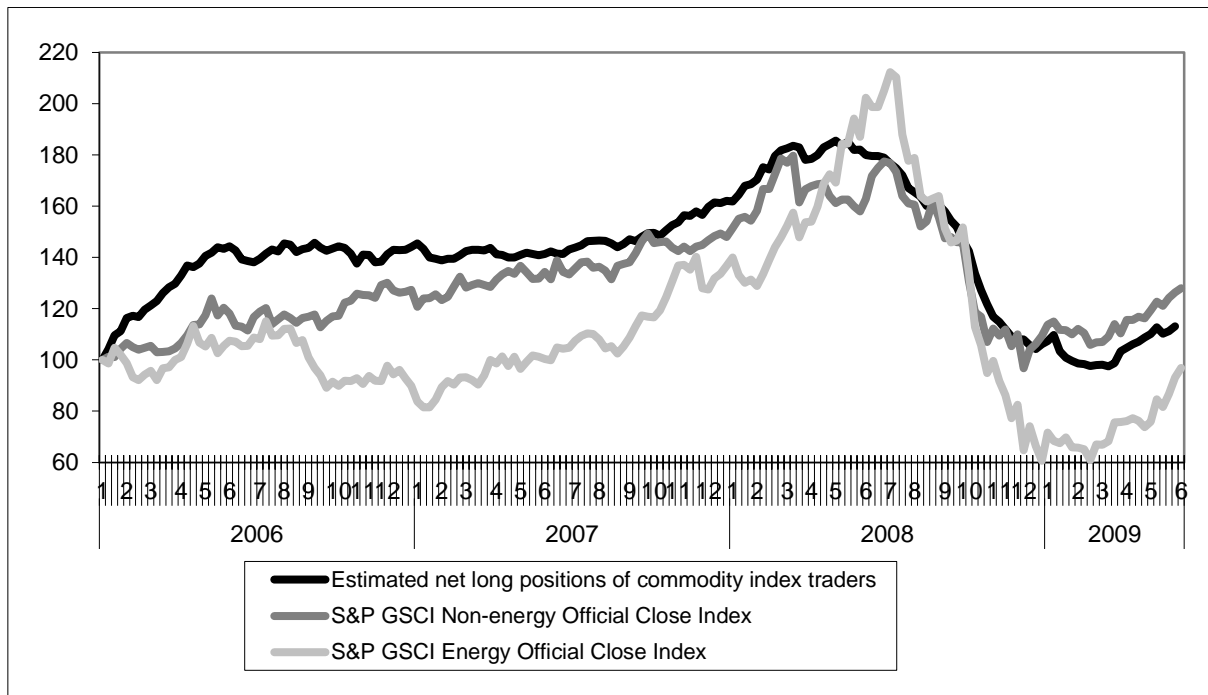
There are several features specific to commodity index trading. First, as Masters and White (2008) argue, commodity index funds are created specifically for speculation on price movement in commodity futures, not as an investment vehicle typical of other financial futures. Further, commodity index traders tend to take a long position in futures markets by gaining the roll return and in the process pushing futures prices up.²² These factors are likely to have contributed to price volatility and drove many commodity prices to historic highs in the first half of 2008.

²⁰ Masters and White (2008) report that 85–90% of index positions are held by swaps dealers, which are dominated by four investment banks: Goldman Sachs, Morgan Stanley, J.P Morgan and Barclays Bank, which together accounted for over 70% of swap dealings in 2007–2008.

²¹ The Standard & Poors–Goldman Sachs Commodity Index (S&P GSCI) and the Dow Jones–AIG Commodity Index are the most popular commodity indices: the former's market share is just under 66% while the latter accounts for the remaining 33% (Masters and White, 2008). These indices are based on prices of the nearest-to-expiry futures contracts.

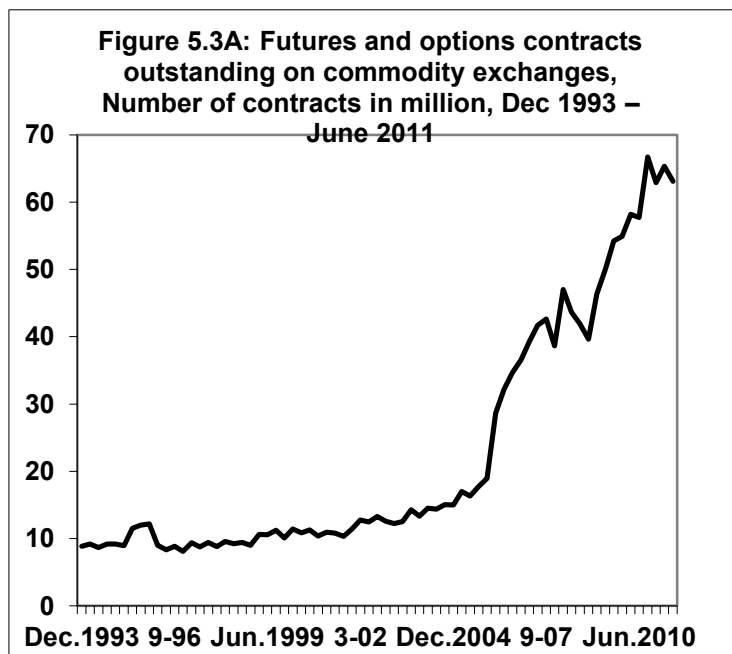
²² The roll return is derived from the periodic sale of futures contracts nearing expiry and the simultaneous purchase of futures contracts bearing more distant expiry dates (the roll). The roll returns depend on market conditions. They are positive when markets are in backwardation (futures prices are progressively lower with rising maturities) and negative when markets are in contango (futures prices decline with rising maturities).

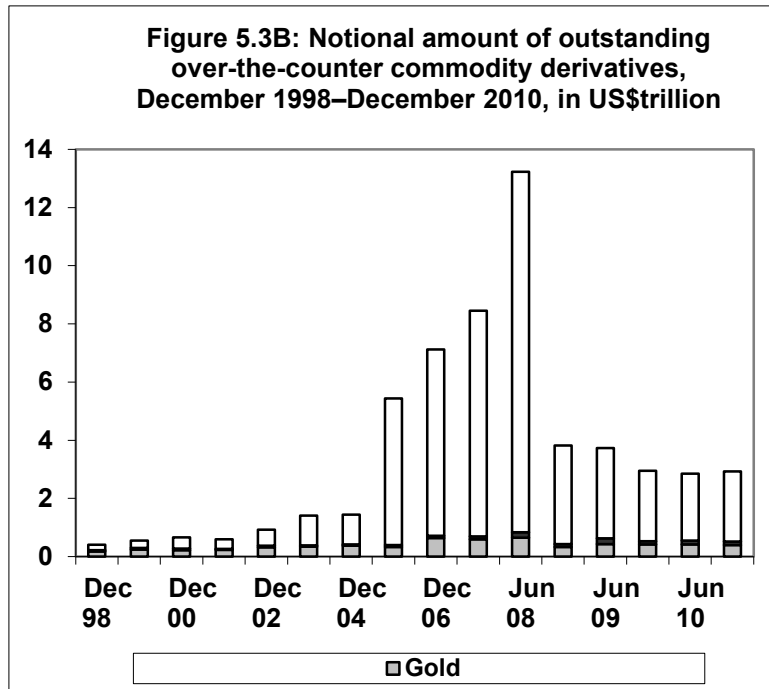
Figure 5.2 Estimated Index Trader Positions and Commodity Prices, January 2006-June 2009



Source: Updated from Chart 2.2 in UNCTAD (2009)

Figure 5.3 Outstanding Volumes of Commodity Derivatives Contracts in Futures and Options Exchanges and OTC Deals





Sources: Updated from UNCTAD (2011, chart 2.1), drawn from data compiled by Bank for International Settlements (BIS) in *Quarterly Review*, June 2011

The dramatic decline in the outstanding OTC commodity derivatives and index trading during the last quarter of 2008 clearly contributed to the sharp fall in commodity prices observed for those months (Figure 5.2 and Figure 5.3). The volume of OTC trading has remained at a subdued level since then (Figure 5.2.B). This reflects the fact that OTC deals involve a transaction through swap deals whereby contracting parties assume counter-party credit risks, which are still seen as risky among investors given the severity of the recent global banking crisis. In contrast, as shown in Figure 5.2.A, after a short period of de-leveraging of net positions, financial investors returned to commodity exchanges in 2009, actively taking their positions in futures and options. This is driven by their renewed appetite for risk premiums associated with commodity trading under the prevailing environment of low interest rates in developed countries. UNCTAD (2011) estimates that the commodity-related assets under management by financial investors recorded a historic high in March 2011, to a level of US\$410 billion, about double the pre-crisis level, and their ratio to global GDP increased more than four-fold between 2008 and 2010.

Thus, trading activities in world commodity markets have undergone some fundamental changes in both the form and the scale of links between activities in commodity and financial markets. As UNCTAD (2011) notes, in the process, portfolio investors launch more complex commodity-linked financial instruments and products in response to heterogeneous and changing demands. More recently, the share of passive index trading has been diminishing despite its increased absolute volume, as many investors have turned to a trading strategy based on the active management of commodity-related funds. Irrespective of the instruments used, these portfolio investors tend to act as *noise traders* in derivatives markets, as they take trading positions with less reference to development in physical commodity fundamentals. The increased presence of noise traders could make prices more excessively volatile than warranted by fundamentals in all asset markets. With it, the nature of commodity price dynamics might have altered significantly over the short run, if not in the medium term.

5.4 The financialisation hypothesis as an explanation for excess price volatility

Given the accelerated financialisation of commodity markets through the expansion of derivatives markets and dealings over the last ten years, it is not surprising that the high volatility of commodity prices is

increasingly conjectured as being linked to this development. Fears have frequently been expressed that speculative activities by financial investors in commodity futures markets and OTC dealings can exacerbate price volatility.

As discussed elsewhere (Nissanke, 2011c, 2012), it has long been accepted that the co-movement in commodity prices mirrors common macroeconomic shocks to inventories. However, what is debated intensely in the excess co-movement hypothesis is whether the co-movement is in excess of anything that can be explained by common macroeconomic effects such as current or expected inflation, or changes in aggregate demand, interest rates, and exchange rates.²³ In this context, we suggest that with the financialisation of commodity markets, inventory adjustments to commodity stocks held are increasingly influenced by activities in derivatives markets and dealings, particularly in index trading. Since financial investors opt to hold commodities *virtually* through futures contracts as part of their portfolio, other asset prices are bound to affect commodity prices. By implication we suggest that an ‘open interest’ – that is *virtual* commodity stocks held in futures contracts as part of diversified asset portfolios – may significantly affect commodity prices. If so, commodity prices and their inventory adjustments can be increasingly exposed to swings in *market sentiment* in asset markets in general. Should this be the case, the excess co-movement in commodity prices may also be explained by the ‘liquidity’ effects, whereby traders operating across different asset markets are subject to swings in market sentiment, hence to common cyclical movements in market liquidity conditions.

We suggest, then, that commodity prices, along with prices of any assets traded globally, can be largely influenced by market liquidity cycles in global finance. It can be argued that in commodity markets, where the short-run elasticities of both demand and supply are extremely low, price stability cannot be maintained easily and instantaneously only through inventory adjustments since investors’ sentiments shift. Although financial investors do not deliver physical commodities, changes in futures prices resulting from financial investors responding to swings in general market sentiments and liquidity cycles could therefore affect spot prices. Moreover, changes in market sentiments that affect derivatives markets and deals also lead to an increase in precautionary demand for commodity holding, thus affecting spot prices directly. More generally, since physical commodity stakeholders make decisions on production, consumption and inventory stock management with reference to futures prices, any significant development in derivatives markets, such as a fast-expanding demand for futures contracts from financial investors, could have strong impacts on spot prices. Indeed, Masters and White (2008) confirm that futures prices are used as the benchmark for spot-market transactions conducted by physical traders.

The recent heightened instability common across commodities can therefore be attributed, at least partially, to the growing application of ‘destabilising’ trading by financial investors to commodity exchanges. Specifically, it would not be possible to explain the recent massive swings in commodity prices without taking into account large-scale leveraging and de-leveraging of financial investors in commodity derivatives markets. This financialisation hypothesis needs to be empirically tested, but there is already a sizable literature confirming that the increasing presence of financial investors in commodity derivatives markets have exerted powerful influences on the dynamics of commodity prices over the past decade or so (Gilbert, 2009, 2011; Mayer 2009, 2012).²⁴

²³ The analysis presented by Tang and Xiong (2010) demonstrates that co-movement of prices is significantly more pronounced for commodities which are included in popular investor indices. Furthermore, they argue that commodity price co-movement is not present in domestic markets in China, refuting the hypothesis that it is the result of demand from newly industrialised countries.

²⁴ There are also empirical studies such as Irwin and Sanders (2010), which show limited effects of the financialisation in commodity markets. See Nissanke (2012) for more detailed discussions on how the financialisation process can give rise to excessive volatility in relation to market fundamentals and a review of the empirical literature.

6. International Policy Agenda on Commodities and Development: The Case for Two Global Stabilisation Mechanisms

6.1 Why is global action required?²⁵

As discussed in Section 2.3, the macroeconomic cycles of many CDDCs are dominated by price movements in their major primary export commodities. The large price movements observed in short-run fluctuations as well as over medium-term cycles in the last ten years have amplified this situation, with important policy implications for how CDDCs should manage their economies. The vulnerability to externally originated instability, transmitted through commodity markets, severely constrains the development of commodity-dependent economies. Economic diversification is the real solution, but this in turn requires sustained investment in the new economic structures that would counter the vulnerability created by excessive reliance on commodities. Successful transition requires productive and diversified investment and skilful economic management of commodity prices in the transition period in order to minimise the impacts of fluctuations. Without taking such steps, these countries could be condemned to the ‘commodity-dependence trap’, through negative feedback mechanisms, once commodity prices move sharply downwards. In this sense, commodity dependence has to be addressed explicitly as a macroeconomic condition.

In formulating its Agricultural Commodity Programme and Action Plan, the EU made explicit at the outset that CDDCs’ specific development challenges are due to their exposure to frequent, large-scale shocks originating in world commodity exchanges. However, its strategic programmes were designed and implemented at sectoral levels without being integrated into the overall development strategy framework at either a country or regional level. This can be attributed to the general failure to appreciate the strategic macroeconomic significance of commodity dependence, which was often regarded as a marginal issue in 1990s and 2000s. There is little evidence that macroeconomic management issues were seriously incorporated into the EU’s strategic programmes and Action Plan. Naturally, building resilience of agricultural producers and farmers to external shocks should be a critical, integral part of development strategy for all CDDCs. Given the macroeconomic nature of the commodity dependence, strategies to address commodity-related issues should be designed with a view to promoting investments in production capacity and physical and social infrastructure *economy-wide* as a part of the process of transforming trade and production structures.

Furthermore, as discussed in Section 5.1, excessive volatility in commodity prices as observed over the last decade has been a major threat to the stability of the world economy. Critically, the instability originating in commodity markets has added considerable strains and setbacks to socioeconomic development, including achieving the MDG targets, in all LICs. The sharp rise in the prices of strategic commodities such as grains and fuels particularly hit poor countries that were heavily dependent on imports of these commodities.

Since the problems associated with excessive volatility of commodity prices and the resulting income instability have global dimensions and implications, there is a compelling case for decisive action on the part of the international policy-making community, e.g. governments, multilateral organisations (the IFIs in particular), NGOs and other agencies involved in formulating and undertaking interventions on commodities. In this context, we now make a case for establishing two global facilities to address commodity-related development issues collectively.

²⁵ See FAO (2011) for detailed discussion of the need for action on food security.

6.2 The case for innovative schemes to reduce excessive price volatility in world commodity exchanges

As discussed in Section 5 above, evidence to date suggests that unregulated derivatives markets and dealings that are overpopulated by financial investors with little interest in physical commodities have increased the likelihood of excessive volatility. Furthermore, the scale of the excess may have become so large that stakeholders in physical commodities can no longer rely on price signals from futures markets to make informed decisions affecting demand and supply, including investment decisions for the substitution and conservation of resources. In such circumstances, futures markets cease to perform their intended function – that of price discovery and risk hedging for those with a stake in physical commodities.

The large price fluctuations that have so strained the global economy suggest the need to make a fresh case to tame excessive volatilities in commodity prices. The failure of the previous commodity-stabilisation schemes through buffer-stock management and export-quota allocations embodied in the ICAs of the 1980s are not a legitimate excuse for taking no action.²⁶ While excessive volatilities can give traders and investors attractive short-term gains, the long-term consequences of bubble–bust are now widely acknowledged to be extremely harmful, inflicting heavy collateral damage on world trade and real economies as well as high social costs worldwide. The recent global crisis is a clear testimony to the enormous wedge between private and social returns from activities in asset markets. It has created not only winners and losers in a grossly unfair proportion, but also a colossal negative-sum game for the global economy and community.

Reflecting the depth of the recent global crisis, wide-ranging reforms in the regulation of financial markets are now being considered. Commodity derivatives markets and dealings should be an integral part of such reforms. Moreover, regulation of commodity derivatives markets is critical, as cost–push inflation, led by high and unstable prices of strategic commodities such as food and energy, poses not only an immediate challenge to the macroeconomic stability of the global economy but also a serious threat to the livelihoods of the most vulnerable – the poor in developing countries. Excessive price volatility, which can be attributed to *destabilising* speculation on the part of financial investors with little interest in the development of commodity-market fundamentals, could have wider political ramifications by giving rise to unbearable hardship for the poor and hence social unrest in developing countries. A special case for regulating commodity derivative markets should be made with reference to their unique function in providing physical stakeholders with the means for hedging risks as well as price discovery.

Our discussions so far show that the high vulnerability to excessive price volatility remains one of the critical weaknesses of CDDCs. While the use of derivatives instruments for risk hedging has been often presented as an answer to small producers as well as to governments in CDDCs, hedging instruments require large resources to cover high transaction costs in accessing current market information and keeping close contact with developments in financial and other commodity markets. Such a policy recommendation is predicated on the assumption that commodity markets operate efficiently for risk-hedging purposes.

In this context, the US Commodity Futures Trading Commission has undertaken a series of high-level hearings in order to reintroduce regulatory measures over commodity derivatives markets in oil, natural gas, gold and silver as well as grain markets. Regulatory measures proposed include: (a) a re-imposition of aggregate position limits on futures contracts to counteract the ‘weight-of money’ effects;²⁷ (b) an enhancement of the transparency of activities in futures markets and OTC deals; (c) capital deposit requirements or the requirement of physical delivery on a portion of each futures transaction; (d) closing the regulatory loopholes that have allowed traders to benefit from different regimes governing commodity

²⁶ See Gilbert (1987) and Nissanke (2010b) for a detailed discussion on why the earlier stabilisation schemes failed.

²⁷ Swap/index traders are currently treated as ‘commercial’ traders, not as ‘non-commercial’ traders in the CFTC classification, and thus are free from position limits.

trading; and (e) the imposition of counter-cyclical margin requirements (US Senate Committee, 2009). In addition, UNCTAD (2011b) emphasises the need for increased transparency with respect to fundamentals. However, destabilising speculative activities on commodity derivatives for purely financial gains continue unabated. Given the dynamic nature of the processes determining the pricing of financial and physical commodities, this may point to the general lack of effectiveness of static regulatory measures based on position size. Such measures could be supplemented with regulations targeting the dynamics of commodity derivative markets, e.g. stipulating requirements and regulatory limits on change of positions within a given period of time. Differentiated regulatory and transparency requirements for positions based on their dynamic characteristics, e.g. change over a given period of time, may be more successful in breaking the volatility-amplifying speculative feedback loops.

Alongside these regulatory measures, the significant failure of commodity markets may also warrant intervention through the establishment of new stabilisation mechanisms. Clearly, as commodity markets have become very sophisticated, any policy intervention has to be *innovative*. Relying exclusively on buffer-stock management for stabilisation is both ineffective and costly in the face of rapidly shifting market fundamentals. Similarly, historical experiences show that stabilisation schemes through export-quota allocation or other supply management among producing countries entail significant transaction costs to the negotiating parties as well as other technical issues such as coordination failures and free-rider problems. Good inventory management is a necessary condition for avoiding extreme price volatility in the short run for all commodities. Strategic reserve holdings should be always kept at a prudent level for many essential commodities. It is now well recognised that the very low level of stocks of some grains contributed to the food crisis of 2008.

In addition to better inventory management, it is worth considering an effective instrument for efficient intervention with ‘innovative’ stabilisation mechanisms.²⁸ Such an intervention should be ‘market-friendly’ and ‘smart’, so that it can readily be switched on and off by differentiating between varying market conditions. Interventions should not impede market development and deepening, as enhanced liquidity is critical for effective risk hedging. Hence, under normal, tranquil conditions markets should be left to function efficiently with little interference. As soon as the markets drift towards bubble equilibrium, however, this should trigger an intervention in the form of a circuit breaker to signal to traders that their destabilising speculation will be counteracted.²⁹

With a view to intervening and dispelling ‘excess’ volatility from markets by inducing a swift change in trading behaviour away from destabilising ‘noise’ trading by non-commercial, purely financial investors, a new generation of innovative schemes could be considered, for example, in the form of a virtual reserve holding of individual commodities or a multi-tier transaction tax. These are referred to here as ‘virtual’ interventions, as they are not directed at flows of physical commodities, but imply the firm commitment of a global public agency to contest moves by noise traders by entering into counterbalancing contracts in futures markets or imposing a finely differentiated transaction tax in the light of market development. These, and any other innovative schemes for international action to counter the costs of global commodity market volatility, would require political will and firm government commitment to work towards the more sustainable development of commodity markets.

²⁸ More detailed discussions on the two proposed innovative stabilisation schemes outlined here is found in Nissanke (2010c and 2011).

²⁹ We recognise that specific definition of conditions triggering the ‘bubble’ policy response would be highly controversial and difficult to achieve. One example is the observation by Bookstaber (2008) pointing to the level of liquidity as an indication of bubble market conditions.

6.3 The case for an innovative contingent facility for mitigating income shocks from commodity price movements

Demand management of commodity-dependent economies is very complex, since an externally induced BoP crisis due to the collapse of commodity prices inevitably leads to a sharp drop in domestic demand. The orthodox stabilisation policies adopted primarily to restore external equilibrium in such circumstances can move the economy further away from internal equilibrium, at least in the short run. In the light of domestic aggregate demand, these policies may be *pro-cyclical* to the direction of both internal and external market forces rather than *counter-cyclical* as they should be (Nissanke, 1993). For commodity-dependent economies, macroeconomic management is judged as counter-cyclical when an appropriate policy configuration of fiscal, monetary, exchange rate and financial policies allow softening of the effects of commodity price shocks on both the external and the internal balances *simultaneously*.

Today, after experiencing the upswing in the commodity price super-cycle years 2002, it is understandable that policy-makers in CDDCs are now focusing on how to make best use of resource rents for economic development. However, there is also a possibility that commodity prices may experience another sharp downturn in the not too distant future if the world economy goes into another recession given the fragile recovery from the global financial crisis. The threat of double recession in the global economy is never far away, as many emerging economies which have been behind for the recent commodity boom began to see a slowdown amidst the sovereign debt crisis in Europe and the fear of the collapse of the euro. Furthermore, it should not be forgotten that the recent sharp commodity price increase of basic commodities has produced serious deficits and hardships for LICs dependent on imports of foods, fuels and other essential commodities in their BoP and fiscal balances.

There is therefore a strong case for a more effective global facility for LICs facing BoP crises triggered by sharp movements of commodity prices. In the post-war period, several compensatory facilities were established to offset shortfalls in commodity export earnings such as the IMF Compensatory and Contingency Finance Facility (CCFF) and the European Community STABEX (Maizels, 1994; Hewitt, 1993 and 2010). Past mechanisms are poorly designed and appropriately structured to meet LICs' current needs. The CCFF was established in 1963 as a low-conditional semi-automatic mechanism for temporary BoP support, unfortunately on a non-concessional basis. The CCFF – a non-concessional facility established in 1988 to replace CCF – is so highly conditional on accepting pro-cyclical demand management that very few countries have turned to it. The Exogenous Shock Facility – a concessional loan facility for countries under the IMF's Poverty Reduction and Growth Program, established in 2000 – has continued to carry high policy conditionality, making it less popular and accessible to LICs than it might otherwise be.

Similarly, the STABEX European initiative aimed at the ACP countries met rather limited success because of its pro-cyclical disbursements due to the long time lags from income shocks to the provision of compensation. Further, since this compensation was in the form of grants only to agricultural sectors affected by income shocks, it has been argued that it diverted from other forms of ODA and that the STABEX tends to discourage diversification.³⁰ FLEX, which replaced STABEX and SYSMIN under the 2000 Cotonou Agreement, has been criticised for slow disbursements and resource constraints.

In this context it should be recalled that the protracted debt crisis of HIPCs in the 1980s and 1990s was associated with the absence of an effective and flexible facility of *contingency financing* to deal with external shocks facing HIPCs on an *ex-ante* basis. Throughout the 1980s and 1990s, official creditors kept applying *ex-post* debt-relief mechanisms with policy conditionality attached in response to recurrent liquidity crises and the ensuing 'debt overhang'. Given this background, there is an urgent need to establish a global counter-cyclical contingent financial facility for LICs facing exogenous income shocks, which can ensure the fast

³⁰ Compensation for mineral products was administered under a separate facility –SYSMIN.

disbursement of aid and debt relief with low policy conditionality and high concessionary elements in relation to commodity price shocks or any other externally originated income shocks. Even if the international community succeeds in reducing excessive volatility in commodity prices arising from the financialisation of commodity markets by establishing innovative stabilisation schemes, such as those discussed above, commodity prices would remain volatile due to the intrinsic characteristics of many primary commodities, i.e. extreme low price elasticities of demand and supply (see Section 1). As noted in Borensztein et al. (2009), shocks to commodity prices are very persistent. The year-to-year volatility in the price varies from 10% to 40% across primary commodities.

For LICs, which are often highly dependent on ODA, one of the best ways to deal with their contingency assistance is to structure aid and debt contracts *ex ante* so that they include an automatic debt-relief mechanism. A strong rationale for such flexible contingent debt contracts comes from the fact that debt can be made sustainable in principle, provided that debtors facing lack of liquidity are attended to in an efficient and timely manner. There are several current proposals for efficient, flexible debt contracts that include a contingent clause. For example, Cohen et al. (2005) present similar arguments, suggesting that subsidised *contingent* loans are superior to outright grants for financing productive investment in countries facing high vulnerability to external shocks.

Taking these arguments further, Cohen et al. (2008) propose a new contingent facility: the Counter-Cyclical Loan (CCL). This would seek to replace the grace period of a typical concessional loan with a fixed initial grace period and a floating grace period, which the country can draw upon in the event of a shock. Unlike the proposed CCL, our proposal includes a facility in which contingency is indexed to a verifiable *state of nature*. As discussed in Box 3 below, *the state-contingent* facility is preferred to one tied to the debtor's capacity to pay, such as GDP growth, because it can avoid the potential 'incentive' problem. This is because *outcome* indicators such as GDP growth rates reflect the results originating in exogenous shocks/events outside the borrowers' control, as well as efforts/inputs on the part of borrowers to honour debt obligations. We argue that drawing incentive-compatible, *state-contingent* debt contracts would allow LIC sovereign debtors *automatic* access to contingency financing when hit by adverse unforeseen events.

The importance of instituting a *pre-qualified automatic line of assistance* at times of crises is also emphasised by Kanbur (2010), who calls for a flexible, comprehensive system of social protection for the poor as a response to global crises. Such a facility would facilitate adjustment processes required to deal with shocks and reduce the associated costs of adjustment. A genuinely flexible, state-contingent aid and debt contract is efficient, because it does away with protracted, time-consuming negotiations for *ex-post* debt restructuring and by better aligns the incentives of borrowers and lenders. By addressing the moral hazard problem directly, it could create incentives for sovereign borrowers to make efforts to attain better performance than the current mechanisms used by the IFIs for aid allocation and debt sustainability.³¹ The presence of such an incentive-compatible contingency facility could make LIC policy-makers more accountable to domestic stakeholders for their policy decisions and subsequent courses of action, since the outcome of their efforts are made transparent by netting out external shocks and events.

It is also important to bear in mind that a temporary contingent credit line may not prove sufficient to make LICs' debts sustainable when they face shocks of large proportions and of a more permanent nature, such as the case with the continuously deteriorating terms of trade faced by CDDCs in the 1980s and 1990s (see Figure 1.1. above). Griffith-Jones and Ocampo (2009) argue that when shocks prove to be permanent rather than temporary, official liquidity provided through a contingent facility should be supplemented by continuous flows of development finance and grants. This is to prevent the disruption of LICs' efforts to advance socioeconomic development in the face of economic shocks or when they are hit by natural catastrophes.

³¹ See Nissanke (2010c, d) for a critical review of the CPIA-based aid allocation and debt sustainability framework.

7. Concluding Remarks

With the sharp swings and continued high volatility of commodity prices affecting the course of the global economy in the new millennium, the ‘commodities and development’ issue is back on the international policy agenda. This ‘revived’ interest could potentially make an important difference to LICs, particularly given that their commodity-related development challenges were eclipsed by the ‘free trade and globalisation’ agenda that dominated international policy discussions throughout the 1980s and 1990s. At this historical juncture, appropriate policies to address the ‘commodity’ issues for development require an in-depth understanding of the nature and sources of their structural vulnerability to shocks originating in world commodity markets, both as exporters and importers.

Box 7.1 State-contingent income-shock facility

As discussed in Nissanke (2010a,b) it can be argued that establishing genuinely flexible, *state-contingent* relief mechanisms when countries are hit by exogenous income shocks could avoid a recurrence of the debt crises. In environments dominated by high uncertainty, any inter-temporal financial contracts have to address the high risk of non-payment. In order to find an efficient solution, risks can be divided into two categories: idiosyncratic risks originating from borrowers’ ability and willingness to pay; and systemic risks stemming from external events which are not under control of borrowers or lenders. Unlike equity contracts in which both parties share systemic risks, standard debt contracts usually oblige borrowers to make regular payments irrespective of events. This means that in debt contracts the borrowers usually assume systemic risks. If a ‘good’ state prevails, borrowers take all returns net of their payments obligation. However, if a ‘bad’ state prevails, borrowers face an illiquidity problem, i.e. difficulties in making regular payments, although the state is beyond their control.

The ‘state-contingent’ schemes are designed to deal with liquidity problems. Following the convention used in Burlow and Rogoff (1981), the literature on sovereign debt emphasises the perverse incentives arising from the difficulty of distinguishing between ability and willingness to pay. They address this ‘moral hazard’ issue by distinguishing between the consequences of borrowers’ own efforts and events beyond their control. The ‘state-contingent’ schemes are therefore designed to deal with moral hazards and liquidity difficulties arising from systemic negative shocks. The state-contingent contract would specify obligations contingent on the ‘nature of states’, and hence deal explicitly and effectively with uncertainty associated with exogenous shocks and systemic risks. As Krugman (1988) notes, the trade-off between debt forgiveness and financing in a typical negotiation can be improved by indexing repayment to the ‘state of nature’, which can be verified.

There remains a significant overlap between the LDCs and CDDCs. Over the last decade or so, there has emerged an almost unanimous consensus that vulnerability to external shocks was a major factor behind the repeated economic crises faced by LICs in the past and it carries the risk of a renewed accumulation of unsustainable external debt stocks in LDCs and CDDCs. The evidence suggests that commodity dependence is a significant part of this vulnerability. This makes it vital to define effective commodity-development strategies at the country, regional and global levels. In this context the paper discussed challenges facing the international community and offered guidance for formulating practical initiatives that could assist CDDCs to overcome their commodity-dependence development traps beyond the MDGs. For many smaller CDDCs, the commodity sector is expected to play, as a default option at least, a significant role in creating the conditions for socially inclusive and sustainable development by building the capacity to invest in sustained productivity growth.

The paper examined the historical evolution and the recent developments and experiences in commodity markets, trade and production. Starting with an analysis of development challenges faced by CDDCs, the

paper emphasised understanding their structural vulnerability to commodity price shocks in terms of the large scale of their *exposure* as well as their weak capacity to withstand them, i.e. *resilience*. More specifically, it argued that integration into the global trade system through commodities carries inherent social and economic vulnerabilities. These vulnerabilities, acting in the global institutional context, create negative feedback that undercuts the positive benefits and income generated through involvement in free trade. This creates a commodity-dependence trap, which is the result of *multiple* adverse mechanisms resulting from reliance on commodities for international trade.

The ‘commodity-dependence development trap’ is presented as a specific condition resulting from vulnerability-driven negative feedback operating through multiple channels. One of most visible negative feedback mechanisms at work is a macroeconomic condition with its powerful economy-wide ramifications. This mechanism is often largely responsible for CDDCs’ persistent structural vulnerability resulting from their undiminished exposure to negative shocks combined with declining resilience over time.

A clear example of such a condition is found in CDDCs’ experiences during the debt crisis of the 1980s and 1990s, when real commodity prices plummeted. Throughout the 20-year period, most CDDCs required repeated doses of debt relief, which came with a string of policy conditionalities to carry out economic reforms through liberalisation, deregulation and privatisation. Many CDDCs were identified as HIPCs. During most of the debt-crisis period, CDDC’s resilience to shocks often faltered in the absence of rigorous public and private investment in their productive capacity. The episode characterising CDDCs’ historical performance in economic growth and socioeconomic development during these decades illustrates the importance of tackling the source of their structural vulnerability. Yet commodity-related development issues did not feature in the policy debate or in the IFIs’ management of the protracted debt crisis.

At the *country* level, effective commodity-development strategies should be built around realistic goals, defining specific instruments and exit strategies consistent with those goals. The goals should be set with the overall objective of reducing the degree of exposure to shocks through economic diversification as well as building the resilience at the micro and macro levels through sustained and innovative investment in productive capacity. Clear criteria for the evaluation of policies in the context of understanding specific commodity-related challenges should also be part of any commodity-development strategy. In this regard, defining more objective criteria for identifying commodity dependence could inform the results-based formulation of interventions and facilitate objective evaluation, which could feed into the design and implementation of future initiatives.

To be effective in fast-changing commodity markets, policy-makers need to undertake continuous assessments and re-appraisals of interventions in relation to agreed indicators of commodity-related vulnerability, with its negative feedback loops identified in each specific context. In the light of our discussions on the emerging landscape governing commodity production and trade under globalisation presented in Section 3, it is important to emphasise that the origins and foundations of institutional constraints facing farmers and smallholders engaged in commodity production in all organisational forms need to be reflected in development strategies.

New institutional arrangements offered by the international community, including the EU, for commodity production, marketing and trade should be closely scrutinised to ensure that they do not undermine the interests of domestic stakeholders. This is also consistent with the EU’s sustainability drive, because commodity-development strategies cannot work effectively if the interests of primary producers are not properly safeguarded and firmly protected in global commodity value chains. Negative long-run effects of the accelerating pace of ‘land grabbing’ and the deteriorating eco-system as a result of climate changes, among other things, should also be evaluated and appropriate policies and actions to counteract such effects should be actively considered and consistently pursued.

Global commodity production and markets are fiercely competitive, constantly subject to the interplay of diverse forces. Much attention has recently focused on the use of financial instruments to strengthen the

resilience and competitiveness of primary producers and other actors, as well as for commodity-producing countries. Such market-based financial solutions and risk-management instruments do not necessarily offer fragile countries and fragmented producers workable solutions to improve their competitiveness when they are exposed to huge shocks from price volatility, let alone remove them from commodity-dependence traps. As with other economic activities, technological and institutional innovation and accelerating 'learning by doing' are key to becoming strong and competitive commodity producers in global trade and markets. This suggests the need to pay more attention to building the resilience of commodity producers through investment in sustained productivity growth and institutional capacity to consolidate their positions in global commodity value chains and create an economic base for advancing social development as envisaged in the current debate on post-MDGs.

In reality, the landscape governing commodity production and trade under globalisation tends to discourage the process of learning and accumulation that is so critical for economic development. These conditions call for a new international framework to improve the share of benefits accruing to producers and producing countries from the integration of their commodity sector with the rest of the world. We should create an environment for strengthening international and domestic institutions governing commodity trade and production throughout commodity chains.

In this context, the paper noted that commodity-related development challenges are not confined to CDDCs. First, the extreme volatility of commodity prices has become a major source of instability to the world economy. The highly unstable commodity prices over the past decade have also had profound impacts on the course of economic development of LICs that export and/or import commodities. The instability arising from world commodity exchanges have added considerable strains and setbacks to socioeconomic development in LICs, including achieving the MDG targets. The sharp rise in the price of strategic commodities such as grains and fuels hit poor countries that depend on importing them.

Because the problems associated with excessive volatility of commodity prices and the resulting income instability have global dimensions and implications, the paper argued for two new global facilities to address commodity-related development issues collectively: (a) innovative stabilisation schemes to reduce large fluctuations in commodity prices that are well beyond what could be explained by demand–supply fundamentals of individual commodities and standard macroeconomic variables; and (b) a compensatory financing facility such as a state-contingent compensating facility as a basis for managing counter-cyclical macroeconomic demand to mitigate the negative impacts of income instability associated with exogenous shocks, such as large variation in the price of strategic commodities. Both schemes have innovative elements to address new challenges facing the global community.

Establishing and managing these schemes would depend on the political will of the global community to reduce the excessive price volatility and income instability that have derailed LICs' socioeconomic development. The lack of strong political and financial support led to the demise of the earlier stabilisation mechanisms and compensatory financing facilities. It is unacceptable to let LICs to bear the brunt of the global costs of volatility and instability originating in world commodity exchanges, in which large financial investors influence price dynamics in pursuit of high private returns. This calls for a new international policy framework that contains concerted global actions to address commodity-related development challenges at source. As is so often the case, the power and will to counteract destabilising market forces still lie largely with the rich nations, including those in the EU. Without a radical change in their understanding of and approaches to commodity-related development challenges, the world's poorest people will continue to pay the highest price and the socioeconomic development of LICs will be deflected from a secure and sustainable path.

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An Agenda for International Action on Commodities and Development

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Annex 1 – EU All-ACP Agricultural Commodities Programme (A3CP)

Background

Much of the conceptual basis of the A3CP stems from the EU staff document EU SEC (2003) 908 (EU, 2003), which analysed the challenges facing commodity-dependent developing countries (CDDCs) and discussed development strategies available to them. The document recognised that ‘...commodities still are the major source of employment, income and export earning in many developing countries, and as such remain an important vehicle for developing modern economies’. It emphasised that traditional commodity activities could not provide the sole basis for successful economic development, and pointed to the need ‘... to reduce vulnerability both at individual and at the national level’, and that attention should be paid to alternative sources of income and employment. Thus, the document contains the basic elements of understanding of commodity dependence as vulnerability, without making this point explicitly. This represented a considerable policy development resulting from the post-liberalisation experience of the late 1990s, and the re-assessment of the principles of coordinated international action on commodities.³²

The challenges were identified as ‘long-term declining price trends; short-term price volatility; international market concentration and integration; market reforms in producing countries; and the over-dependence on traditional primary commodities, such as coffee, cocoa, cotton, bananas and sugar’. The document concluded that the current economic context made it difficult to address the problem of low commodity prices by means of buffer stocks or supply management, and observed that most International Commodity Bodies, specifically set up to address commodity price issues, have turned their attention to statistics gathering and publications, provision of discussion platforms and project formulation and monitoring, particularly those addressing commodity value chains.

In proposing practical interventions to address the needs of CDDCs, the document placed the emphasis on national policies, calling for the development of effective commodity-development strategies. The document identified ‘a combination of mutually supportive strategy elements’:

1. Strengthening supplier capacity in traditional commodity chains
2. Developing financial services, including price insurance
3. Creating an enabling national environment for private-sector development
4. Fostering horizontal diversification
5. Constructing safety nets
6. Promoting an enabling international climate: trade and competition
7. Promoting market-based international measures to balance demand and supply
8. Promoting corporate social responsibility (CSR), including codes of conduct

The practical recommendations focused on promoting the competitiveness of the commodity sector while also developing alternative sources of income. Another key recommendation was on practical interventions to foster national commodity-development strategies.

The EU document COM (2004) 89 (EU, 2004) made commodity dependence and commodity value chains the basis for addressing poverty in CDDCs. The proposals made in the Action Plan for Commodities (EU, 2004) were set against the context of a prolonged period of declining prices for most of the agricultural commodities relevant to the CDDCs. The A3CP identified trade as the pillar of inclusive global economic

³² For example, the 1999 Helsinki Principles agreed by the Council Group on Commodities.

growth leading to the sustained reduction of poverty. The staff working document saw the link between declining revenue from commodities and commodity dependence and poverty in CDDCs.

An innovative feature of the A3CP was its implementation through five International Organisations (IOs) with expertise in commodity value chains: the Common Fund for Commodities (CFC), the Food and Agriculture Organization of the United Nations (FAO), the International Trade Centre, (ITC) the United Nations Conference on Trade and Development (UNCTAD) and the World Bank.

The A3CP

The A3CP was launched in 2007 with a budget of €45 million to be used for pilot projects across the ACP countries. In view of its relatively small size (given the number of countries and range of commodity sectors involved), the A3CP gave preference to small-scale pilot projects that could potentially be replicated across ACP countries by using other EU financing mechanisms.

The broad goal was to reduce poverty in ACP countries by (a) enhancing the productive capacities and incomes of commodity producers; and (b) improving the resilience of commodity producers in the face of volatile commodity prices.

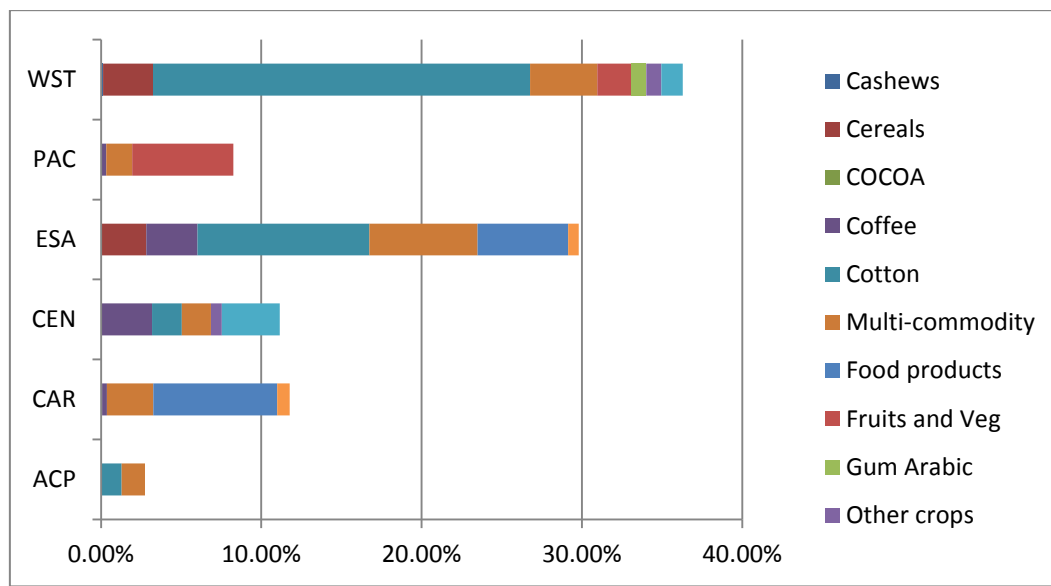
The goals were reflected in four broad results. The specific allocation of activities addressing different results was decided in the Kick-off Workshops (KOWs) on the basis of needs of the target regions and the distinctive competence the IOs.

| Result | Lead IO |
|--|------------|
| Result 1: Development of strategies | ITC |
| Result 2: Strategy Implementation: Improved access to production factors, markets and services | All IOs |
| Result 3: Improved access to market-based risk management | WB-ARMT |
| Result 4: Effective use of IOs' expertise, complementarities and synergies | PSC/CU/IOs |

The Programme Steering Committee (PSC) managed the A3CP, in addition to which there were regular inter-agency meetings. A full-time Coordinating Unit (CU) was formed and financed as part of the budget. The A3CP sought out the views of the intended beneficiaries in the six target regions by organising a series of KOWs attended by the country representatives, IOs with relevant competence and membership base, and the representatives of the EU and the CU. The KOWs played a critical role in decisions concerning where and on what projects to allocate funds, taking into account the areas of competence of each IO.

The Programme allocated €15million on cotton-related activities, in recognition of the challenges facing cotton-exporting countries in the liberalisation process pursued through the WTO. The allocation of funds to other commodities was the result of the *process* of identifying activities, including stakeholder consultations in KOWs as well as inter-agency meetings and the discussions in the PSC at the ACP headquarters in Brussels. Given the multitude of inputs involved, and that funding decisions were made by committee consensus, the selection of activities can be considered an *emergent result* (see Figure A1).

Figure A1. A3CP funding allocation by commodity and region, % of total



Sources: A3CP Global Workplan (WST: West Africa, PAC: Pacific, ESA: Eastern and Southern Africa, CEN: Central Africa, CAR: Caribbean, ACP: ACP-wide)

Programme ‘deliverables’

Based on the summary of deliverables contained in the Programme Completion Report (Berthelot, 2012), the outcomes are listed under three core results:

1. Result 1. A total of 17 commodity-sector development strategies were designed and most were incorporated in the national development programmes in the countries concerned. These strategies were based on an inclusive process, with workshops and stakeholder consultations, as well as market scans and value chain analysis.
2. Result 2. Institutional frameworks for commodity development were strengthened through training in five regional producer organisations. Market structures were supported through warehouse-receipt schemes and support for the emergence of commodity exchanges in East and West Africa. Quality improvement and certification schemes were implemented for cotton across Africa, and for coffee in East Africa. Warehouse facilities for grain were enhanced in East Africa, with corresponding support for quality assurance, supervision and management practices.³³
3. Result 3. Risk assessment across value chains was conducted in 20 countries, and a weather risk-management plan was developed for the Caribbean. Overall, 16 weather risk-management products were developed and five commodity risk-management strategies completed.

Most of the tangible impact was achieved under Result 2, and some under Result 3. While the logic for activities conducted under Result 1 is clear, there remains the practical problem of evaluating them since it takes time for a strategy to demonstrate material impact. For this reason, we believe that most reporting under Result 1 is input-based, although the IOs successfully translated financial inputs into knowledge inputs.

³³ See the A3CP Completion Report for details.

Feedback from the A3CP participants

In terms of drawing significant lessons from the A3CP, its practical implementation is relevant only to the extent that it reflects its principles and strategies.³⁴

On completion of the A3CP, each participating IO made its assessment.³⁵ While this was not a peer review or evaluation, a number of IOs made similar observations. For instance, the timing and implementation cycle of the A3CP proved critical. Since it was intended to formulate individual commodity-development strategies for ACP countries *and* undertake activities based on these strategies, implementation took place under considerable time pressure. It was mentioned that this affected alignment with complementary activities of other partners, and that the timing of some activities did not match agricultural cycles. These time pressures were not intentional but were a side effect of the coordination and implementation process.

The focus of programme activities had been the subject of much discussion. In a typical observation, one IO reported that given ‘the wide array of countries, stakeholder and country agendas it was too ambitious to expect that a narrowed down selection of countries and commodities could have been identified democratically’ (FAO, 2012). This refers, essentially, to the *limitations* of using an inclusive, representative and legitimate process to identify priority interventions. The IOs repeatedly noted that the programmes and agendas of individual stakeholders dominated the strategic approach intended.

At the same time, the weakness of A3CP strategies was also noted. In particular ‘... policy papers tended to lack the in-depth knowledge of difficulties entailed, and the pitfalls to be avoided in implementing policy recommendations and activities in these difficult environments, and the limited technical capacities available in developing countries’ (World Bank SDN, 2012). It was also observed that IOs concerned only with technical assistance tended to focus on macro-level policy and strategy issues in the form of research papers and reports. It was in most cases very difficult for the IOs managing sub-project activities to make use of the recommendations made in these high-level policy papers.

The size of the A3CP in relation to the scale of its intended outreach in most ACP countries and in the most important commodities limited its impact. Much of its significance depended on drawing attention to specific problems in the commodity sector, and leveraging resources through engaging with commodity business. The real impact of the A3CP activities would come from identifying successful models of commodity-sector development and encouraging their uptake and replication via external sources of financing. To achieve this, there was a need to pay more attention to evaluating the technical and economic effectiveness of programme interventions. In this context, it was observed that the A3CP’s greater visibility would contribute to its impact. Most activities were well recognised at the level of coordination and planning, while achieving visibility in the field required considerable efforts and had to compete with the core activities for the limited resources. It was mentioned that greater involvement with EU Country Delegations would help in leveraging the Programme’s impact (CFC, 2012; ITC, 2012). Further, it was indicated that greater direct involvement on the part of the International Commodity Bodies could expand the links with commodity business.

More than one IO pointed out that the European Commission required an exit strategy. It was suggested that EU Country Delegations could take ownership for each A3CP project within their region and include follow-up activities within their own programmes (ITC, 2012). Clear understanding of the exit strategy and an emphasis on the impact of the A3CP through replication of its successes, rather than direct interventions, would be particularly important because of strict budgetary time limits (CFC, 2012).

³⁴ For detailed analysis of specific actions, refer to the reports of participating IOs and the review of the outcomes by the CU as well as the independent evaluation (ADE, 2012).

³⁵ Based on CFC (2012), ITC (2012), FAO (2012), UNCTAD (2012), WB-ARMT (2012) and WB-SDN (2012).

In the same vein, it was suggested that linking policy advice and technical assistance with investment opportunities were a precondition for success (World Bank, 2012). Strategies and priorities need to be reviewed and amended regularly on the basis of evaluation of pilot projects in order to maintain the Programme’s connection with the practical issues involved in developing the commodity sector.

Renewed attention to commodity security as a priority in EU commodity policies

When the A3CP was conceived, the EU policy agenda in commodities was driven largely by development considerations. Since then, the prolonged commodity price boom has given rise to the concern to secure the supply of commodities.

Many EU countries now regard commodities not only in the context of their development policies, but also as an element of economic security in terms of ensuring EU companies’ unfettered access to raw materials. The EU Communication COM (2011) 25 referred to ‘unprecedented movements of prices in recent years’. As the result of new developments in commodity markets, as discussed in Section 3, the Communication further called for action ‘to mitigate the negative effects of such movements on both producers and consumers, especially the most vulnerable ones’. This is set against the background of the 2020 vision for a resource-efficient Europe (EU COM, 2011) 21.

It is also apparent that the recommendations for action are driven by different goals in different commodity sectors identified for EU action. These sectors include energy, agriculture and raw materials, with their corresponding emphasis indicated in the table below:

| Sector | Emphasis |
|---|---|
| Energy and raw materials | ...to ensure that the benefits of the internal market are realised for Europe's businesses and citizens ... and provide a good model for how to address the challenges resulting from the growing interdependence of commodity and related financial markets. |
| Agriculture and security of food supply | ...to address underinvestment in agriculture and reduce impact of price volatility on the most vulnerable |

As the research literature suggests, and is confirmed above, policy priorities reflect differences in the long-term availability of renewable and non-renewable commodities. The initiative called for an integrated strategy to mitigate the impact of Europe’s rising import dependence, particularly on supplies from countries and regions facing instability or not based on market systems.

The initiative identified three pillars of implementation:

1. Ensure access to raw materials from international markets under the same conditions as other industrial competitors.
2. Set the right framework conditions within the EU in order to foster the sustainable supply of raw materials from European sources.
3. Boost overall resource efficiency and promote recycling to reduce the EU’s consumption of primary raw materials and decrease the dependence on imports.

For this background paper, the first pillar is the most relevant given its focus on international markets and trade with a constituency largely consisting of CDDCs. It advocates a number of specific policy measures, including:

- promotion of rules and agreements to secure sustainable access to raw materials including greater compliance with international commitments at multilateral and at bilateral level;
- elimination of trade-distorting measures;
- application of EU trade policies to promote well-functioning markets for raw materials;

An Agenda for International Action on Commodities and Development

- greater coherence in measures affecting EU demand for raw materials, including relevant standards and certifications.

Recognising that much of the supply of many raw materials comes from CDDCs, the RMI underlines the case for coherence between the EU's development policies and its need for undistorted access to raw materials. The RMI proposes to address both goals through strengthening governance, promoting a sound investment climate and the sustainable management of raw materials.

Annex 2 – On the definition of commodity

The term ‘commodity’ has a range of meanings in economics. It is used in the current paper in relation to commodity dependence as a specific kind of economic vulnerability. This vulnerability stems from the common economic properties of products most accessible to producers in developing countries due to their low levels of productive capital. The term ‘primary commodities’ is frequently used in this context, which we take to indicate that further processing with greater capital input is likely to be required further up the supply chain. The characteristic features commonly attributed to commodity-style market behaviour can be summarised as follows:³⁶

- Commodities are competitively tradable.
- Commodities are uniform and near-infinitely divisible without loss of consumer value.
- Commodities are near perfectly fungible within simple quality characteristics.

Markets for commodities with such properties tend to be price-inelastic and very sensitive to changes in supply and demand. This part of the definition of commodity therefore focuses on markets that expose producers in developing countries to a high degree of price volatility.

Depending on the nature of production process, the class of commodities may further be divided into biotic/abiotic, agricultural or mineral, renewable or non-renewable and food or industrial commodities in the agricultural class. These classes are not mutually exclusive, and as the development of biofuels industry has shown, may be more interconnected than previously assumed. We believe that such overlaps and the intertwining of commodity prices through commodity index instruments make the precise taxonomy based on production processes less useful for identifying vulnerable groups and structural vulnerability in developing countries.

In an attempt to put international action on commodities on firmer ground, the Integrated Programme for Commodities adopted by UNCTAD produced an agreed list³⁷ of products, indicating that it could be reviewed under an agreed procedure. While the list would now be considered obsolete, the practical orientation of this approach has advantages in policy formulation. This is also apparent in the approach adopted in 2008 in the RMI, which also focuses on a list of ‘critical’ commodities.

The current paper does not attempt to rectify deficiencies in the above definition of commodities. In our discussion of commodity-related vulnerability, our analysis implies that the relevant definition of commodities combines commodity-style market behaviour, recognised by the three characteristics above, and the accessibility of a particular product to producers in developing countries for production and trade. We conclude that the combination of these properties is sufficient to produce the phenomenon of commodity dependence as used in the paper.

³⁶ We are not aware of a rigorous model connecting low levels of productive capital to products that exhibit commodity-style behaviour, although such a connection seems intuitively obvious.

³⁷ Bananas, bauxite, cocoa, coffee, copper, cotton and cotton yarns, hard fibres and products, iron ore, jute and products, manganese, meat, phosphates, rubber, sugar, tea, tropical timber, tin, and vegetable oils, including olive oil and oilseeds.