IWIM - Institut für Weltwirtschaft und
Internationales Management

IWIM - Institute for World Economics and
International Management

# Global Food Price Increases and Repercussions on Africa: Which Public Policy Interventions are really appropriate?

**Karl Wohlmuth**

**Professor Emeritus, Fachbereich Wirtschaftswissenschaft, Universität Bremen**

**Berichte aus dem Weltwirtschaftlichen Colloquium**

**der Universität Bremen**

Nr. 123

Hrsg. von

Andreas Knorr, Alfons Lemper, Axel Sell, Karl Wohlmuth

Universität Bremen

# Global Food Price Increases and Repercussions on Africa: Which Public Policy Interventions are really appropriate?

**Karl Wohlmuth**

**Professor Emeritus, Fachbereich Wirtschaftswissenschaft, Universität Bremen**

Andreas Knorr, Alfons Lemper, Axel Sell, Karl Wohlmuth (Hrsg.):

Berichte aus dem Weltwirtschaftlichen Colloquium
der Universität Bremen, Nr. 123, March 2012
ISSN 0948-3829

Bezug: IWIM - Institut für Weltwirtschaft
und Internationales Management
Universität Bremen
Fachbereich Wirtschaftswissenschaft
Postfach 33 04 40
D- 28334 Bremen
Telefon: 04 21 / 2 18 – 66517
Fax: 04 21 / 2 18 - 4550
Email: iwimsek@uni-bremen.de
http://www.iwim.uni-bremen.de

## Zusammenfassung

In diesem Beitrag werden die Auswirkungen des weltweiten Anstiegs der Lebensmittelpreise in Afrika in den Jahren 2010/2011 betrachtet. Die Auswirkungen sind gravierend, es gibt jedoch Unterschiede nach Ländern, sozialen Gruppen und Subregionen. Fragile Staaten und Konfliktländer, Länder mit unsicherer Ernährungslage und Öl exportierende Länder sind durch die globalen Preisanstiege für Lebensmittel, vor allem für die Hauptgetreidesorten, am stärksten betroffen. Aber auch die Armen in den Nettoexportländern für Lebensmittel können betroffen sein.

Die afrikanischen Länder exportieren Lebensmittel und Agrarerzeugnisse; Weizen und Reis sind dagegen wichtige Einfuhrgüter. Empirische Evidenz für die globalen Nahrungsmittelpreisanstiege von 2007/2008 zeigt, dass die Transmissionseffekte von Veränderungen der internationalen Preise auf die heimischen Preise in afrikanischen Ländern nicht überschätzt werden dürfen. In vielen Fällen besteht keine langfristige Beziehung zwischen Veränderungen der internationalen und der inländischen Lebensmittelpreise, so dass lokale, nationale und subregionale strukturelle Faktoren eine große Rolle für die hohen und steigenden Inlandspreise in afrikanischen Ländern spielen.

Die Spekulation auf den Rohstoffmärkten und auf den internationalen Finanzmärkten mit Rohstoffzertifikaten ist von erheblicher Bedeutung. Die Spekulation spielt auch eine Rolle bei den Preisanstiegen für Nahrungsmittel, doch dürfen auch lokale Faktoren, die eine Spekulation mit Nahrungsmitteln in Afrika begünstigen, nicht ignoriert werden. Die Analyse der Transmissionseffekte von Preissteigerungen auf internationalen Nahrungsmittelmärkten zeigt, dass die Auswirkungen auf die afrikanischen heimischen Nahrungsmittelpreise auch nicht überschätzt werden dürfen. Andere Mechanismen dürften derzeit wichtiger und ungleich folgenschwerer sein – insbesondere die direkten Käufe von Land in Afrika. Studien über das „Land Grabbing“ in Afrika zeigen, dass Landkäufe in institutionell schwachen afrikanischen Ländern zu spekulativen Hortungen von Land führen können.

Nötig sind öffentliche Interventionen auf nationaler, regionaler und globaler Ebene, um die Auswirkungen des weltweiten Anstiegs der Lebensmittelpreise zu dämpfen und die strukturellen Schwächen, die für steigende Lebensmittelpreise verantwortlich sind, zu beseitigen. Die wichtigsten Maßnahmen auf nationaler, regionaler und globaler Ebene werden aufgelistet und diskutiert. Es zeigt sich, dass viele Möglichkeiten gegeben sind, Gegenstrategien zu entwickeln, um von den globalen Preistrends in Afrika unabhängiger zu werden. Dazu sind jedoch auch Maßnahmenbündel auf regionaler und auf globaler Ebene notwendig. Vorgeschlagen werden kurzfristig, mittelfristig und langfristig wirkende Maßnahmen.

## Abstract

In this contribution the impacts of the global food price increases of 2010/2011 on Africa are assessed. The impacts are severe, but there are differences with regard of country groupings, social groups and sub-regions. The various impacts have to be studied carefully as these do not affect only the macro-economy and the poor people, but also the development options and the long-term development perspectives of Africa. However, definitions and classifications have to be clarified first to understand the transmission effects and the poverty impacts of the global food price increases. It has to be made clear which food items, which African countries and which country groupings are affected by the price increases on the world market. Fragile and conflict countries, food insecure countries and oil exporting countries are affected most by the global price increases of food products and especially of staple crops. But also the poor in net food exporting countries may suffer.

African countries are exporters of food and agriculture products but wheat and rice are important import commodities. The transmission effects of global price increases to domestic prices and the impacts of price increases on the poor (looked at as consumers and producers) are considered as well. Empirical evidence that is available from the 2007/2008 global food price increases shows that in many cases there is no long-term relationship between changes in international and changes of domestic food prices in Africa, so that local, national and sub-regional structural factors are important for explaining the fact of high and increasing domestic prices.

The speculation with raw materials and raw materials certificates on international finance markets has an impact on the spot prices too. This also refers to global food prices. However, the role of local factors in Africa being responsible for speculation should not be ignored. The analysis of the transmission effects shows that the impacts of international food prices on domestic food prices should not be overestimated; these effects are limited. Other mechanisms may play a larger role, especially the land sales and land leases in Africa. Studies on "land grabbing" show that such land sales and land leases are a great problem in institutionally weak countries as such land may be used for speculative hoarding rather than for productive cultivation. Such deals could aggravate the food supply situation in such countries.

Public interventions are needed at national, regional and global levels to work out feasible strategies which may help to counterbalance the impacts of global food price increases and to overcome the structural factors being responsible for the food price increases in Africa. The most important measures to be taken at national, regional and global level are listed and discussed. A package of measures is then proposed by referring to short-term, medium-term and long-term actions.

**Keywords:** Global food price increases; African food prices; food security; structural impediments to food production; food imports and exports; global food price transmission

**Stichwörter:** Globale Nahrungsmittelpreisanstiege; afrikanische Nahrungsmittelpreise; strukturelle Probleme der Nahrungsmittelproduktion; Nahrungsmittelimporte und -exporte; globale Transmission von Preiseffekten

**JEL Classification:** O13, O15, O55, Q02, Q18

**Contents**

**Abbreviations and Acronyms**

| | |
|---|---|
| AfDB | African Development Bank |
| ARPN | Asian Research Publishing Network |
| AU | African Union |
| CA | cereal availability |
| CAADP | Comprehensive Africa Agriculture Development Programme |
| CB | cereal balance |
| CE | cereal exports |
| CI | cereal imports |
| CP | cereal production |
| CR | cereal requirements |
| CS | cereal stock drawdowns |
| DFID | Department for International Development |
| DRC | Democratic Republic of Congo |
| ECA | Economic Commission for Africa |
| FAO | Food and Agriculture Organization |
| GCM | Global Computable Model |
| GIEWS | Global Information and Early Warning System on Food and Agriculture (of FAO) |
| GIGA | German Institute of Global and Area Studies |
| ICT | Information, Communication, Telecommunication |
| IDS | Institute of Development Studies |
| IFPRI | International Food Policy Research Institute (in Washington DC) |
| IWVWW | Internationale Wissenschaftliche Vereinigung Weltwirtschaft und Weltpolitik |

| | |
|---|---|
| NPAID | Norwegian People's Aid |
| PREM | Poverty Reduction And Economic Management (Network of the World Bank) |
| R&D | Research & Development |
| SSA | Sub-Sahara Africa |
| STI | Science, Technology and Innovation |
| UNIDO | United Nations Industrial Development Organization |
| US $ | US Dollar |
| WTO | World Trade Organization |

# Global Food Price Increases and Repercussions on Africa: Which Public Policy Interventions are really appropriate?[1]

**Karl Wohlmuth**

**Professor Emeritus, Fachbereich Wirtschaftswissenschaft, Universität Bremen**

## Introduction

Since the global food price increases of 2007/2008 the price hike of 2010/2011 is now the second one that affects African countries and its many poor people severely. Food imports of Africa have surpassed the sum of US$ 50 billion (Adesina 2011), and because of the global price increases the total value of imports will further escalate. It is widely held that global food price increases have drastic effects on the macroeconomy of African countries, via food price inflation, increasing current account imbalances, and further budget imbalances which are associated with public food subsidies. As well the private households in African countries are affected severely, via price increases of the staple food crops and of other food items like sugar and vegetable oils; thereby the nutrition and poverty levels are affected negatively. It is obvious that a lot can be learned from the repercussions of the 2007/2008 price hike on the African economies and their people, especially with regard of transmission effects,

[1] This essay is an extended version of the article that appeared as Wohlmuth, Karl, 2011, Global Food Price Increases and Repercussions on Africa, Rural 21, The International Journal for Rural Development, Volume 45/Number 5/2011, pp. 22 – 26. Full Internet Access to the article is at: http://www.rural21.com/uploads/media/rural_2011_5_22-26-1_01.pdf ; and for the English Summary and the References for the article in the volume see: http://www.rural21.com/english/archive-2005-2011/archive2011-05en/focus/global-food-price-increases-and-repercussions-on-africa/. This discussion paper version contains arguments on food price increases, speculation and land grabbing in Africa and a discussion of policy issues for national, regional and international levels.

macroeconomic effects, household income effects and poverty effects.

In this contribution three major issues will be discussed. First of all, definitions and classifications are presented to consider the overall scope of the problem and the differences of the situation by country groupings for Africa. Second, the transmission channels of the global food price increases to domestic African prices and the impacts on countries and households are assessed. Third, the needed policy interventions at national, regional and global levels are discussed with reference to short-term, medium-term and long-term actions to be taken.

## Definitions and Classifications

It is argued that the global food price increases impact on African countries via suddenly occurring and sharply increasing net food import positions of the African countries, thereby contributing to macro- and micro impacts via enforcing severe adjustments of public and private actors. Most of the African countries are net food importing countries with regard of "raw", unprocessed food, but they are also trading in cash crops and in non-food products such as agricultural raw materials. Most of the African countries are as well large net importers of processed food, but many countries in Africa are trying to increase the share of processed food in all food exports so as to increase value added, employment and incomes, and foreign exchange earnings.

Africa is somewhat a special case with regard of the food imports and food exports, compared to other low income countries. Only 12 of the 47 Sub Saharan African (SSA) countries are net exporters of "raw" food (Ng/Aksoy 2008). This has to do with the fact that African oil exporters and African conflict countries (countries in conflict, post-conflict countries, and fragile countries) are mostly net importers of "raw" food. When excluding the oil exporting countries and the conflict countries only 5 out of 28 African low-income countries are net food exporters. Most of the African low income countries are therefore affected by this unfavourable trading position with regard of food, and global food price increases will affect them seriously.

However, all of SSA has in terms of "raw" food a trade deficit of only slightly more than 1 per cent of their total imports (total imports are measuring readily the import capacity of these countries, and so the food deficit to total imports ratio is measuring quite properly the affectedness by global food price increases). Middle income SSA countries are food surplus countries while low income SSA countries are net food importers. Oil exporters, conflict countries, and other low income countries have however deficits of about 3 per cent of their total imports (Ng/Aksoy 2008). But, SSA countries are significant agricultural exporters when including cash crops and agricultural raw materials, while they are importing mainly grains. Most of the SSA countries and most of the low-income countries in Africa are therefore net agricultural exporters when including all the important food and agriculture products (Ng/Aksoy 2008).

This means that the net food imports are not that high relative to total imports. When looking at the overall food and agriculture products trade balance of African countries one can see that there is some scope for adjustments. Small changes in the agricultural production mix - from cash crops to food crops - can generate enough food for Africa's people, and a number of African countries can then even achieve a net export position in food products. Vulnerable in terms of "raw" food – measuring the share of net imports to total imports - are only Benin, Guinea-Bissau and Senegal, but the first two countries have other export items and Senegal has considerable processed food exports (Ng/Aksoy 2008).

The problems are then to find the appropriate agriculture products/tropical crops/food products production mix and to allow for adjustments in production - by a proactive agricultural policy, by speeding up the processing of food, of tropical crops, and of agricultural raw materials, and by improving the productivity and competitiveness of food crops, cash crops and of agricultural raw materials. The other message is that oil exporters and conflict countries have to solve their problems by overcoming - through non-oil sector development and reconstruction and development - the many biases against food and agriculture production.

Oil exporters in Africa are in a particular situation as oil industry expansion has affected negatively the competitiveness of food and agriculture production. Countries like Algeria and Nigeria, but also Angola and Sudan, have neglected all branches of agriculture, not only food production. The three SSA oil-producing countries, and especially Sudan (North and South), are then quickly and largely affected by global food price increases. Algeria (and other North African economies) can use for some time their foreign exchange reserves to import food and government funds to subsidize food but there are limits to such policies so that people will suffer and then protest. Egypt experienced in the period of February 2010 - February 2011 a food price inflation of 19% (World Bank, April 2011), and has basic food items subsidized for around 85% of its population; an unsustainable position has emerged. This creates fatal macro-economic policy problems and severe adjustment problems at the level of households.

Worst cases are countries like Sudan (Republic of Sudan and Republic of South Sudan), being oil exporters and post-conflict countries (with conflicts in and between the two countries, a disrupted infrastructure, weak institutions, and since decades neglected agricultural and industrial sub-sectors). Global food price increases impact on such countries heavily as - for sake of reaching macroeconomic stability - they have to reduce the very high amount of fuel and food subsidies; such a move is also considered as necessary in order to finance social safety nets which are better targeted towards the poorest segments of the population. However, neither reducing food and fuel subsidies nor targeting assistance to the poorest seems to work.

Fragile states such as Sierra Leone, Eritrea, Cote d'Ivoire, Liberia, Chad, Guinea, and Sudan, defined by the African Development Bank (AfDB) as countries after conflict which have already undertaken first steps of reform and reconstruction (see Barungi et al. 2011), have specific problems. These are low human development, weak institutions, negative twin balance positions for the budget and the current account, and also negative cereal trading balances. Two definitions are in this context of interest – cereal balance can be defined first, as cereal production (CP) minus cereal requirements (CR); second, as cereal availability (CA) minus cereal requirements (CR). Cereal availability (CA) measures cereal production (CP), but also cereal imports (CI), possible cereal stock drawdowns (CS), and cereal exports (CE). Both measures of cereal balance (CB) are affected with serious data, information and projection problems and with methodological gaps, but such measures impact quite heavily on domestic food price changes and on the build-up of inflationary expectations (Barungi et al. 2011). The message is that for fragile countries (but also for other low income countries) two groups of policies are requested: pro-active agriculture sector policies (on production, imports and exports, and stocking activities) and comprehensive food security policies (based on a realistic assessment of cereal requirements). Even the African fragile African countries have cereal balances that are manageable if adequate, coherent and timely policies are followed by national, regional, and international actors. For the Total Fragile States we observe a Cereal Balance in the second definition of -1,980 thousand tons for 2009/10 (derived from Cereal Availability of 19,646 thousand tons and Cereal Requirements of 21,626 thousand tons, although the deficit in the first definition is much larger). Sudan has the largest deficit of -1509 thousand tons (Barungi et al. 2011), a country with plenty of agricultural resources in the North and in the South.

One should also remember that Africa has 21 out of 29 countries needing external food assistance although there are different types of food insecure countries in Africa (FAO 2011, Barungi et al. 2011). There are countries with an exceptional fall of food production (such as Zimbabwe); countries with a widespread lack of access to food (like Eritrea, Sierra Leone, Niger, and Somalia); and countries with severe localized food insecurity (like Ethiopia, Malawi, DRC, Benin, Guinea, Kenya, Sudan, Uganda, and others). Some of these countries are fragile states, others not. Beside of conflicts prevalent in the country and/or in the region, causes that matter are political instability, bad governance, policy and institutional weaknesses, and lack of adaptation to drought and climate change. But, affectedness by landlocked-ness, export bans of neighbouring countries, and high import dependencies with regard of fuel and food plays also a role. Also these countries can do a lot to manage food insecurity problems, by pursuing consistent agricultural and agro-industrial development policies, risk management policies, and by moving to a long-term regional integration process firm with supply commitments in times of emerging food insecurity.

For fragile and food insecure states the impact of global food price increases is severe, but one has to put clearly the different causes of affectedness. Increasing production, planning for needed imports and stocking levels, redirecting production and consumption towards local grains, and developing targeted social safety nets for the benefit of the poorest (so that they can afford to buy grains) are feasible strategies to react to global food price increases by pursuing longer-term action.

## Transmission Effects and Impacts

It is possible to learn a lot from the 2007/2008 global food price increases for understanding the effects and impacts of the current food price surge (see Minot 2010). When comparing the international and domestic prices across 83 food prices in twelve African countries, the average increase of domestic prices between June 2007 and June 2008 was 63 per cent in US dollar terms, which amounts on average to 71 per cent of the international market price increase. Domestic food prices have increased only in the range of 25 - 39 per cent in South Africa, Ghana and Cameroon, but by over 150 per cent in Ethiopia and Malawi. For the second group of countries domestic factors, like supply shortages and policy failures, must have played a great role. Landlocked countries in Africa show much higher increases of domestic prices than coastal states, what is obviously caused by severe transport and marketing problems and by export bans in the region. By type of commodities, one can observe great differences. Price increases in Africa were highest for maize with 87%, for wheat with 65%, and for rice with 62%. Local food, like plantains and cassava, has shown much lower price increases in the range of 9% and 12%. Definitely internationally traded commodities, like wheat and rice, have seen higher price increases than local ones; this shows that the transmission effects are much stronger for internationally traded grains. Supporting the production of local grains is a reasonable policy, so that the proper production mix of local and internationally traded grains is becoming important.

However, this (short-term) trend analysis of international and domestic prices for the period 2007/2008 (Minot 2010) hides very important factors that are responsible for the transmission of effects. When conducting econometric exercises for much longer periods (5 - 10 years) - to follow up more clearly the linkages between domestic and international prices - quite different results occur relative to the (short-term) trend analysis (Minot 2010). In this (longer-term) analysis 62 domestic price series for maize, rice and wheat for nine SSA countries were then compared and tested against the respective international prices. Only 13 out of 62 prices show a long-run relationship to the extent that domestic prices were influenced by the international prices. Only 6 out of these 13 prices had a significant long-term elasticity of transmission, implying that on average only a share of 0.54 of a one percentage change of international prices was transmitted to domestic prices. Even countries like Ethiopia, Malawi, and Mozambique, with the highest proportion of prices being linked to international prices, showed that the share of linked prices was less than 40%. For Zambia, Uganda and Kenya there are no prices with a proven long-run relationship to international prices/markets. With regard to the particular commodities, just 10% of the maize prices were significantly related to the international maize prices, but almost half of the domestic rice prices were related to the international rice prices (Minot 2010). There is a simple explanation for this; the African countries are near to self-sufficiency in maize but are highly import-dependent on rice (especially so some West African countries). Maize imports have a share of only 5% in relation to Africa's domestic consumption, while the share of imported rice is in countries like Ghana and Mozambique higher than 50% relative to the domestic rice consumption (but this share is only 11% in Tanzania).

The fact that considerable (short-term) trend price increases were prevalent for all domestic food prices but international price increases were transmitted in a longer-run context only to a relatively small extent to Africa has to be explained. There are some factors at work which are far beyond the developments of grain markets: first, food price increases coincided with fuel price increases; second, there were grain export restrictions at work in SSA (in East, South and West Africa); third, policy factors created foreign exchange shortages - by fuel subsidies and by interventions into foreign exchange markets and private trading; fourth, poor harvests in some countries have affected the cereals balance; fifth, so-called threshold effects seem to have worked because of the quite large price increases that were now becoming recognized and measurable in Africa (Minot 2010). Sixth, a single conflict country like Cote d'Ivoire can disrupt severely supply and distribution channels of a whole region, leading to higher prices in countries like Burkina Faso, Mali, and Niger (World Bank, April 2011). Landlocked countries in Africa show - because of these factors - consistently higher domestic price increases than coastal ones. These six points of explanation give also hints for policy changes that are urgently needed. Some policy conclusions refer to structural economic changes, promoting regional integration, reforming trade policy, improving marketing chains, long-term infrastructure provision, liberalization of foreign exchange and trading markets, etc.

There is however also the problem of widely diverging local prices in one particular country (for a twelve months period in 2007 - 2008). In Tamale (Northern Ghana) the price of local rice was \$438 but the price was as high as \$734 in Kumasi (Central Ghana); the price all over Ghana varied from \$334 to \$734. The maize price in Mozambique ranged from \$177 to \$285 (Minot 2010). However, these huge differences cannot be explained only by transportation cost (Minot 2010). It may have to do, among other factors, with marketing channels, with marketing structure and with marketing power. Also local taxes may play a role (the multiple taxation of agriculture products is a widespread phenomenon in Africa). In times of food price increases, private and public actors are profiting at the expense of local producers and consumers (such high price divergences in one country may be the result of the interaction of both groups - public and private actors).

Speculation is also considered as a potential local, sub-regional, national, regional and international factor contributing to food price increases, but opinions on the extent of impact differ widely. According to one view (see Bass 2011) there are considerable price level effects (with calculations of up to 15% in 2008 at spot markets) of speculation at international food markets (by dealings of investors at futures markets for cereals). There may however be derived and related effects and/or more localized and specific factors being at work at regional, national and local levels in Africa, contributing to cereal price increases via speculation. One such important channel may be the leasing and hoarding of land in Africa ("land grabbing" for current or future biofuel and export food production). "Land Grabbing" has obviously to do with the speculative behaviour of investors in times of increasing fuel and food prices (see Wohlmuth 2012 on the new interaction of food and energy markets); such investments are not simply long-term oriented investments for private profit. OXFAM has presented the general case with policy implications (see Oxfam 2010, 2011) and has given country-specific evidence on such land deals in Africa. The problem is that such deals are of increasing relevance also in countries with very weak institutions, like South Sudan (reaching 9 per cent of the land in South Sudan; see: The Oakland Institute 2011 and NPAID 2011). As shown above in the paper, the measurable transmission effects of international food price increases to local food price increases in Africa are rather limited. But because of these huge land deals in Africa global speculative behaviour of investors is directly affecting African food markets, African land markets and future agricultural production.

However, research on the role of speculation in Africa is not advanced and information about speculation factors is scarce. Other experts look more at the fundamental causes of high food prices in times of new demand and supply factors and of the high volatility of food prices caused by unpredictability of harvests, inadequate stocking and sudden exchange rate shifts (see the debate launched by IDS at the University of

Sussex in Brighton: [http://www.ids.ac.uk/news/food-price-volatility-debating-causes-and-consequences](http://www.ids.ac.uk/news/food-price-volatility-debating-causes-and-consequences)). Some regulation of speculative activity is nonetheless proposed, but action should be mainly concentrated on the fundamental factors being responsible for high and volatile food prices.

As the recent growth acceleration in Africa is based largely on price increases of cash crops, agricultural raw materials, oil and minerals (Kappel 2011), the fundamental factors being responsible for these high and volatile prices as well as the developmental responses in Africa to these price trends will be important for future growth perspectives in Africa. Developmental action by African states in responding to these fundamental factors is therefore requested, what also necessitates a stricter control of highly speculative land deals. Otherwise another period of episodic growth will emerge, and Africa had many of such periods since independence from colonialism.

The main questions are now how to act, how to react, and how the adjustments to food price increases are done. The affected countries, their governments, their farmers, exporters and importers, farms and firms, the humanitarian organizations, and the households and consumers will respond to these price developments in the short-term, in the medium-term and in the long-term. They can do this by modifying economic and sector policies, by changing the production mix towards local food crops, by re-orienting the trading and investment patterns, by adapting the household budgets and the consumption preferences, and by initiating, modifying and enlarging the social safety nets. More generally arguing, the question is how adaptations and adjustments will be done – preferably in a planned way - to the new sequence of price surges occurring since the one of 2007/2008. However, regrettably there is not enough evidence available yet on the responses and reactions of all these actors in African countries. There are no data available on the reallocation of land and resources to local food crops since 2007/2008, on policy shifts, or on the changes of consumer preferences and household budget allocations in urban and rural areas.

There is some limited evidence on the poverty and nutrition effects of the global food price increases in Africa. These effects can only be measured adequately by referring to up to date household income and expenditure surveys and to recent data on the farmers' and households' food production and consumption decisions. Some evidence is available showing that the number of households in extreme poverty is increasing in times of such price surges; but there seem to be great variations between countries. South Sudan can lose – by the 2010/2011 food price increases – a poverty reduction potential of 9% to 18% from the 2009 level (see Barungi et al. 2011). Estimates by World Bank for developing countries show that the higher food prices have negative net effects - raising the number of "net consumers of food" living below the poverty level of 1.25$ much more than benefitting the "net producers of food" by lifting them up above this poverty level (World Bank, February 2011). The number of the poor therefore increases sharply. The model is based on a quantification of the poverty impacts of food price increases by using a global computable model (GCM) with a sample of 28 country household surveys. The impact of the food price increases on the cost of living of the net (food) consumers and on the profits of the net (food) producers is then estimated.

Beside of the poverty impacts, the nutritional implications of the higher food prices are obviously severe and have to be measured – increasing malnutrition, substitution away from more nutritious food, and various other dietary consequences follow. There are negative effects on the health of infants and pregnant women, on child enrolment rates and on the working time and working load of children, but there are also severe repercussions on the overall productivity of workers in rural areas. Also negative social, cultural and environmental effects may result. The case of Nigeria - a country with sharply increasing food imports and high poverty levels - shows that a much deeper analysis of poverty and nutrition impacts of the food price increases is needed (Elijah 2010). In Nigeria, one can observe that the nutritional consequences of the food price increases are obviously quite severe (leading to: reduced nutritional intake, more consumption of carbohydrate food and neglect of protein, and more use of food products leading to obesity). Poverty income analysis is therefore not sufficient to study all the consequences; effects on nutrition have to be studied as well. More general economic consequences of the higher food prices impact on the poor, and especially on the children and the women. The pulling out of children from school for work and the sale of productive assets by households, like livestock, are consequences of the food price increases not only in Nigeria (World Bank, February 2011). Poverty impacts in Africa are however more limited in case of good harvests of domestic crops (maize, sorghum, millet, and cassava) and in case of stable market conditions and supply frameworks for rice.

## Public Interventions at National, Regional and Global Levels

At the *national* level, pro-active agricultural and agro-industrial development strategies are a first priority; related policy issues are infrastructure, stocking, and trade policies. This strategy concept may also help to redirect timely and effectively land and other resources towards local food crops. In order to react to the social and economic consequences of the rising domestic food prices, strategies for installing social safety nets and reducing untargeted fuel and wheat subsidies (in order to finance the social safety nets) are recommended, as well as strategies to improve the production and marketing conditions for local grains. Infrastructure, competition, taxation and local trade and marketing policies are important as domestic grain prices are so divergent within countries. The huge differences of domestic prices within countries give evidence that more is needed than a nation-wide policy response. Global food price increases have often very localized impacts; factors such as geography, transport systems, local trading chains, and connectivity of (primary and secondary) markets play a role. Internal market connectivity is a major problem, and therefore ICT improvements (transmitting price changes, price differences and supply positions via mobile phone) can do a lot. Macro policy measures are requested to ensure that food price inflation does not accelerate the inflationary expectations in the country.

At the *regional* level, much action is needed. Regional trade in grain is important, especially for Africa. Production and supply conditions can vary much between coastal and landlocked countries, but also within countries. Some countries have breadbasket areas with food surpluses alongside of areas where the supply of food is highly restricted (Sudan, Ethiopia, Mali, and others). Landlocked countries were severely affected by export bans in times of increasing food prices - in West Africa, East Africa and South Africa. Export bans in African sub-regions should be prevented by firm commitments and respective actions between governments. At the regional African level, governmental commitments are also needed towards establishing regional infrastructure, regional market information systems for key cereal markets, and regional marketing structures. Trade commitments and trade rules are important to avoid in times of price surges and supply shortages sudden export bans. The efforts towards the implementation of the CAADP (Comprehensive Africa Agriculture Programme) should also be intensified; regional African initiatives to accelerate agro-industries and to scale up related R&D activities are important as long-term strategies (Yumkella et al. 2011; Wohlmuth 2011; Wohlmuth et al. 2011). African local grains may be promoted in this context.

As African conflict and post-conflict countries, fragile countries, food insecure countries, and mineral and oil exporting countries have their own problems to provide food at reasonable prices to their citizens, specific initiatives for these groups of countries are requested. Regional Economic Communities can do a lot to support such member countries. In all these groups of countries with problems to supply food at reasonable prices to their citizens there is an urgent need for installing effective social safety, poverty reduction and nutrition support programs. Social safety nets, poverty reduction and nutrition support programmes are relevant for net food importing and for net food exporting countries (even Sudan was a food exporter in times when millions of its people in Darfur and South Sudan were dependent on food aid). A Social Policy Draft Charter of the African Union (AU) concerning such social safety nets should be taken as a starting point for such measures. Direct income increases for the poor – by cash payments or in kind - are important instruments to address the problems, not only in times of sharp food price increases. Also, Regional Centres for Humanitarian

Relief may be envisaged for drought-affected, disaster-prone and infrastructure-poor areas in Africa. Risk Management Tools should be developed at the regional level. Integration of Social Protection, Climate Change Adaptation and Disaster Risk Reduction is requested (see the new report on the Addis Ababa Workshop March 2011, compiled by World Bank 2011). National and regional approaches to adapt to climate change impacts are urgently requested and have to be speeded up. Regional Value Chains for Grains may be another important instrument, and such chains are already part of African Union's Priority Commodities concept. In this context Science, Technology and Innovation (STI) policies are very important at the national and the regional level and along the whole agriculture-manufacturing-services value chain in order to improve on the food security situation (Wohlmuth 2011).

At the *international* level, interventions in global trade are needed to address the issue of export bans, as these bans have added to the price surges and food security problems in Africa. The asymmetry in the WTO rules is in this respect a great problem – there are more instruments available to protect domestic producers in times of depressed prices, especially in the form of safeguard clauses, rather than instruments to care for the consumers in times of sharply increasing prices. Recently the asymmetry in trade rules is considered as a major problem, but so far no solutions were found at the level of WTO to address adequately this problem (Konandreas 2010). Exporters in the region or at the global level should not fuel the food price acceleration by food export bans and other protective measures. Market information systems for cereals are needed, and it is a global task to get more, better and timely information on production, stocking, import and export trends by regions and globally. Some initiatives are going on, but the process is still very slow. Early warning systems depend on such information, especially in Africa. Also, the global development initiatives for fragile countries, conflict countries, post-conflict countries and food insecure countries in Africa have to be scaled up. R&D and STI policies at the global level can support African regional and national R&D and STI policies towards increasing agricultural productivity, post-harvest production and the competitiveness of agro-industry in Africa (Yumkella et al. 2011, Wohlmuth 2011, Adesina 2011). Further much important policy areas to be addressed in this context at the global level are finance speculation with cereals and "land grabbing". However, as emphasized by studies on finance speculation at cereals markets (see, for example, Bass 2011), the scope for policies to counter the speculative price effects transmitted from futures markets onto cereals spot prices are quite limited. More information, more transparency, more ethical trading and other moves to restrict such transactions at the global level can be mentioned as counter-strategies. A more direct approach seems to be the control of direct investment in land, especially in the institutionally weakest countries in Africa, like South Sudan. "Land grabbing" leads too often to land hoarding, to the displacement of local producers, of local cereals, etc. Investment rules for land in Africa are emerging, but also too slowly and without firm commitments for actors.

At all the three levels (national, regional, global) short-term, medium-term and long-term objectives, targets, instruments, and measures are needed and have to be put in place to achieve progress.

## References


Adesina, Akinwumi, 2011, Achieving greater impacts for agricultural research and innovations on the poor in Africa, Keynote Speech at Food Security, Health and Impact Knowledge Brokering Conference, June 2011, University of Leeds, Leeds, UK

Barungi, Barbara/Kazuhiro Numasawa/Adeleke Salami/Adalbert Nshimyumuremyi, May 2011, The Impact of the 2010-11 Surge in Food Prices on African Countries in Fragile Situations, African Development Bank/AfDB, Africa Economic Brief, Volume 2, Issue 4, May 2011, 8 pages

Bass, 2011, Hans-Heinrich, Finanzmärkte Als Hungerverursacher?, Bonn: Deutsche Welthungerhilfe e. V. März 2011, 110 Seiten, Information und Download: http://www.welthungerhilfe.de/fileadmin/media/pdf/Studien/FINAL_WHH_2011-04-08.pdf

Elijah, Obayelu Abiodun, 2010, Global Food Price Increases And Nutritional Status Of Nigerians: The Determinants, Coping Strategies, Policy Responses, And Implications, pp. 67 - 80, in: ARPN (Asian Research Publishing Network) Journal of Agricultural and Biological Science, Vol. 5, No. 2, March 2010

FAO, 2011, Crop Prospects and Food Situation, No. 1, March 2011, FAO GIEWS/Global Information and Early Warning System on Food and Agriculture, 32 pages

IDS/Institute of Development Studies, 2011, Workshop on February 6, 2012, Financial Markets and Food Price Volatility Workshop: Mapping Key Actors and Urgent Actions, Information and Access: http://www.ids.ac.uk/news/food-price-volatility-debating-causes-and-consequences)

Kappel, Robert, 2011, Afrika vor dem wirtschaftlichen Durchbruch?, GIGA Focus, Nummer 11, 2011, 8 Seiten

Konandreas, Panos, 2010, Trade policy measures during food price swings: WTO-compatible instruments to respond to world price instability, Policy making capacity building document: Policies for Good Economic Management of Food Price Swings in African Countries, A project implemented by FAO Trade and Markets Division, funded by UK Department for International Development/DFID, March 2010, Rome: FAO 2010

Minot, Nicholas, December 2010, Transmission of World Food Price Changes to Markets in Sub-Saharan Africa, IFPRI/International Food Policy Research Institute, 36 pages (published as IFPRI Discussion Papers number 1059 in 2011)

Ng, Francis/M. Ataman Aksoy, January 2008, Who Are the Net Food Importing Countries?, Policy Research Working Paper 4457, Washington D.C.: The World Bank, Development Research Group, Trade Team, January 2008, 51 pages

NPAID/Norwegian People's Aid, 2011, The New Frontier, A baseline survey of large-scale land-based investment in Southern Sudan, by David K. Deng, Researched by GADET-Pentagon and the South Sudan Law Society Report 1/11 (March), 48 pages, Information and Access: http://www.npaid.org/filestore/NPA_New_Frontier.pdf

OXFAM, 2010, Land Grabbing in Africa: A Review of the Impacts and the Possible Policy Responses, by Tinyade Kachika, Oxford, UK: Oxfam International, Launched 2010 at the African Union Meeting on Land Policy, Lilongwe, Malawi, 69 pages, Information and Access: http://www.oxfamblogs.org/eastafrica/wp-content/uploads/2010/11/Land-Grabbing-in-Africa.-Final.pdf

OXFAM, 2011, Land and Power, The growing scandal surrounding the new wave of investments in land, 50 pages, 22 September 2011, Oxford, UK: Oxfam International: Information and Access: http://www.oxfam.org/sites/www.oxfam.org/files/bp151-land-power-rights-acquisitions-220911-en.pdf)

The Oakland Institute 2011, Understanding Land Investment Deals In Africa, Country Report: South Sudan, 49 pages, Oakland, CA, USA: The Oakland Institute

Wohlmuth, Karl, 2011, Strengthening Technological Effort and Innovation Capabilities, pp. 165 – 199, in: Kandeh K. Yumkella et al., op. cit.

Wohlmuth, Karl, 2012, Die Auswirkungen der globalen Finanz- und Wirtschaftskrise 2008/2009 in Afrika. Lehren für die nationale, regionale und internationale Wirtschaftspolitik für Afrika, S. 102 – 124, in: Berichte, 22. Jg., Nr. 194/195, Januar/Februar 2012, herausgegeben von der Internationalen Wissenschaftlichen Vereinigung Weltwirtschaft und Weltpolitik/IWVWW Berlin

Wohlmuth, Karl/Patrick M. Kormawa/Jean Devlin, Eds., 2011, Agribusiness for Africa's Prosperity: Country Case Studies, Vienna: United Nations Industrial Development Organization/UNIDO, September 2011, 495 pages plus XI

World Bank, 2011, Social Protection and Climate Resilience, Report from an International Workshop in Addis Ababa, March 14-17, 2011, organized by The World Bank, IDS/Institute of Development Studies, UKaid from the Department for International Development, UK, and Economic Commission for Africa, Washington D.C.: World Bank 2011

World Bank, April 2011, Food Price Watch, Washington D. C.: The World Bank, Poverty Reduction And Equity Group/ Poverty Reduction And Economic Management (PREM) Network, 6 pages

World Bank, February 2011, Food Price Watch, Washington D. C.: The World Bank, Poverty Reduction And Equity Group/ Poverty Reduction And Economic Management (PREM) Network, 4 pages

Yumkella, Kandeh K., Director-General of UNIDO/Patrick M. Kormawa/Torben M. Roepstorff/Anthony M. Hawkins, Eds., Agribusiness for Africa's Prosperity, An UNIDO Publication, Vienna: UNIDO, 2011, 345 pages

**Bisher erschienene "<u>Berichte aus dem Weltwirtschaftlichen Colloquium</u>" des Instituts für Weltwirtschaft und Internationales Management**

***(Downloads: http://www.iwim.uni-bremen.de/publikationen/pub-blue)***

*Nr. 1* ***Sell, Axel:***
Staatliche Regulierung und Arbeitslosigkeit im internationalen Sektor. *1984. 35 S.*

*Nr. 2* ***Menzel, Ulrich/ Senghaas, Dieter:***
Indikatoren zur Bestimmung von Schwellenländern. Ein Vorschlag zur Operationalisierung. *1984. 40 S.*

*Nr. 3* ***Lörcher, Siegfried:***
Wirtschaftsplanung in Japan. *1985. 19 S.*

*Nr. 4* ***Iwersen, Albrecht:***
Grundelemente der Rohstoffwirtschaftlichen Zusammenarbeit im RGW. *1985. 52 S.*

*Nr. 5* ***Sell, Axel:***
Economic Structure and Development of Burma. *1985. 39 S.*

*Nr. 6* ***Hansohm, Dirk/ Wohlmuth, Karl:***
Transnationale Konzerne der Dritten Welt und der Entwicklungsprozeß unterentwickelter Länder. *1985. 38 S.*

*Nr. 7* ***Sell, Axel:***
Arbeitslosigkeit in Industrieländern als Folge struktureller Verhärtungen. *1986. 21 S.*

*Nr. 8* ***Hurni, Bettina:***
EFTA, Entwicklungsländer und die neue GATT-Runde. *1986. 28 S.*

*Nr. 9* ***Wagner, Joachim:***
Unternehmensstrategien im Strukturwandel und Entwicklung der internationalen Wettbewerbsfähigkeit. *1986. 28 S.*

*Nr. 10* ***Lemper, Alfons:***
Exportmarkt Westeuropa. Chinas Vorstoß auf die Weltmärkte. *1987. 40 S.*

*Nr. 11* ***Timm, Hans-Jürgen:***
Der HWWA-Index der Rohstoffpreise - Methodik, Wirtschafts- und Entwicklungspolitische Bedeutung. *1987. 57 S.*

*Nr. 12* ***Shams, Rasul:***
Interessengruppen und entwicklungspolitische Entscheidungen. *1987. 23 S.*

*Nr. 13* ***Sell, Axel:***
ASEAN im Welthandelskraftfeld zwischen USA, Japan und EG. *1987. 23 S.*

*Nr. 14* ***Kim, Young-Yoon/ Lemper Alfons:***
Der Pazifikraum: Ein integrierter Wirtschaftsraum? *1987. 24 S.*

*Nr. 15* ***Sell, Axel:***
Feasibility Studien für Investitionsprojekte, Problemstruktur und EDV-gestützte Planungsansätze. *1988. 18 S.*

*Nr. 16* ***Hansohm, Dirk/ Wohlmuth, Karl:***
Sudan´s Small Industry Development. Structures, Failures and Perspectives. *1989. 38 S.*

*Nr. 17* ***Borrmann, Axel/ Wolff, Hans-Ulrich:***
Probleme bei der Planung industrieller Investitionen in Entwicklungsländern. *1989. 28 S.*

*Nr. 18* ***Wohlmuth, Karl:***
Structural Adjustment and East-West-South Economic Cooperation: Key Issues. *1989. 53 S.*

*Nr. 19* ***Brandtner, Torsten:***
Die Regionalpolitik in Spanien unter besonderer Berücksichtigung der neuen Verfassung von 1978 und des Beitritts in die Europäische Gemeinschaft. *1989. 40 S.*

*Nr. 20* ***Lemper, Alfons:***
Integrationen als gruppendynamische Prozesse. Ein Beitrag zur Neuorientierung der Integrationstheorie. *1990. 47 S.*

*Nr. 21* ***Wohlmuth, Karl:***
Die Transformation der osteuropäischen Länder in die Marktwirtschaft - Marktentwicklung und Kooperationschancen. *1991. 23 S.*

*Nr. 22* ***Sell, Axel:***
Internationale Unternehmenskooperationen. *1991. 12 S.*

*Nr. 23* ***Bass, Hans-Heinrich/ Li, Zhu:***
Regionalwirtschafts- und Sektorpolitik in der VR China: Ergebnisse und Perspektiven. *1992. 28 S.*

*Nr. 24* ***Wittkowsky, Andreas:***
Zur Transformation der ehemaligen Sowjetunion: Alternativen zu Schocktherapie und Verschuldung. *1992. 30 S.*

*Nr. 25* ***Lemper, Alfons:***
Politische und wirtschaftliche Perspektiven eines neuen Europas als Partner im internationalen Handel. *1992. 17 S.*

*Nr. 26* ***Feldmeier, Gerhard:***
Die ordnungspolitische Dimension der Europäischen Integration. *1992. 23 S.*

*Nr. 27* ***Feldmeier, Gerhard:***
Ordnungspolitische Aspekte der Europäischen Wirtschafts- und Währungsunion. *1992. 26 S.*

*Nr. 28* ***Sell, Axel:***
Einzel- und gesamtwirtschaftliche Bewertung von Energieprojekten. - Zur Rolle von Wirtschaftlichkeitsrechnung, Cost-Benefit Analyse und Multikriterienverfahren-. *1992. 20 S.*

*Nr. 29* ***Wohlmuth, Karl:***
Die Revitalisierung des osteuropäischen Wirtschaftsraumes - Chancen für Europa und Deutschland nach der Vereinigung. *1993. 36 S.*

*Nr. 30* ***Feldmeier, Gerhard:***
Die Rolle der staatlichen Wirtschaftsplanung und -programmierung in der Europäischen Gemeinschaft. *1993. 26 S.*

*Nr. 31* ***Wohlmuth, Karl:***
Wirtschaftsreform in der Diktatur? Zur Wirtschaftspolitik des Bashir-Regimes im Sudan. *1993. 34 S.*

*Nr. 32* ***Shams, Rasul:***
Zwanzig Jahre Erfahrung mit flexiblen Wechselkursen. *1994. 8 S.*

*Nr. 33* ***Lemper, Alfons:***
Globalisierung des Wettbewerbs und Spielräume für eine nationale Wirtschaftspolitik. *1994. 20 S.*

*Nr. 34* ***Knapman, Bruce:***
The Growth of Pacific Island Economies in the Late Twentieth Century. *1995. 34 S.*

*Nr. 35* ***Gößl, Manfred M./ Vogl. Reiner J.:***
Die Maastrichter Konvergenzkriterien: EU-Ländertest unter besonderer Berücksichtigung der Interpretationsoptionen. *1995. 29 S.*

*Nr. 36* ***Feldmeier, Gerhard:***
Wege zum ganzheitlichen Unternehmensdenken: „Humanware" als integrativer Ansatz der Unternehmensführung. *1995. 22 S.*

*Nr. 37* ***Gößl, Manfred M.:***
Quo vadis, EU? Die Zukunftsperspektiven der europäischen Integration. *1995. 20 S.*

*Nr. 38* ***Feldmeier, Gerhard/ Winkler, Karin:***
Budgetdisziplin per Markt oder Dekret? Pro und Contra einer institutionellen Festschreibung bindender restriktiver Haushaltsregeln in einer Europäischen Wirtschafts- und Währungsunion. *1996. 28 S.*

*Nr. 39* ***Feldmeier, Gerhard/ Winkler, Karin:***
Industriepolitik à la MITI - ein ordnungspolitisches Vorbild für Europa? *1996. 25 S.*

*Nr. 40* ***Wohlmuth, Karl:***
Employment and Labour Policies in South Africa. *1996. 35 S.*

*Nr. 41* ***Bögenhold, Jens:***
Das Bankenwesen der Republik Belarus. *1996. 39 S.*

*Nr. 42* ***Popov, Djordje:***
Die Integration der Bundesrepublik Jugoslawien in die Weltwirtschaft nach Aufhebung der Sanktionen des Sicherheitsrates der Vereinten Nationen. *1996. 34 S.*

*Nr. 43* ***Arora, Daynand:***
International Competitiveness of Financial Institutions: A Case Study of Japanese Banks in Europe. *1996. 55 S.*

*Nr. 44* ***Lippold, Marcus:***
South Korean Business Giants: Organizing Foreign Technology for Economic Development. *1996. 46 S.*

*Nr. 45* ***Messner, Frank:***
Approaching Sustainable Development in Mineral Exporting Economies: The Case of Zambia. *1996. 41 S.*

*Nr. 46* ***Frick, Heinrich:***
Die Macht der Banken in der Diskussion. *1996. 19 S.*

*Nr. 47* ***Shams, Rasul:***
Theorie optimaler Währungsgebiete und räumliche Konzentrations- und Lokalisations-prozesse. *1997. 21 S.*

*Nr. 48* ***Scharmer, Marco:***
Europäische Währungsunion und regionaler Finanzausgleich - Ein politisch verdrängtes Problem. *1997. 45 S.*

*Nr. 49* ***Meyer, Ralf/ Vogl, Reiner J.:***
Der „Tourismusstandort Deutschland“ im globalen Wettbewerb. *1997. 17 S.*

*Nr. 50* ***Hoormann, Andreas/ Lange-Stichtenoth, Thomas:***
Methoden der Unternehmensbewertung im Akquisitionsprozeß - eine empirische Analyse -. *1997. 25 S.*

*Nr. 51* ***Gößl, Manfred M.:***
Geoökonomische Megatrends und Weltwirtschaftsordnung. *1997. 20 S.*

*Nr. 52* ***Knapman, Bruce/ Quiggin, John:***
The Australian Economy in the Twentieth Century. *1997. 34 S.*

*Nr. 53* ***Hauschild, Ralf J./ Mansch, Andreas:***
Erfahrungen aus der Bestandsaufnahme einer Auswahl von Outsourcingfällen für Logistik-Leistungen. *1997. 34 S.*

*Nr. 54* ***Sell, Axel:***
Nationale Wirtschaftspolitik und Regionalpolitik im Zeichen der Globalisierung - ein Beitrag zur Standortdebatte in Bremen. *1997. 29 S.*

*Nr. 55* ***Sell, Axel:***
Inflation: does it matter in project appraisal. *1998. 25 S.*

*Nr. 56* ***Mtatifikolo, Fidelis:***
The Content and Challenges of Reform Programmes in Africa - The Case Study of Tanzania, *1998. 37 S.*

*Nr. 57* ***Popov, Djordje:***
Auslandsinvestitionen in der BR Jugoslawien. *1998. 32 S.*

*Nr. 58* ***Lemper, Alfons:***
Predöhl und Schumpeter: Ihre Bedeutung für die Erklärung der Entwicklung und der Handelsstruktur Asiens. *1998. 19 S.*

*Nr. 59* ***Wohlmuth, Karl:***
Good Governance and Economic Development. New Foundations for Growth in Africa. *1998. 90 S.*

*Nr. 60* ***Oni, Bankole:***
The Nigerian University Today and the Challenges of the Twenty First Century. *1999. 36 S.*

*Nr. 61* ***Wohlmuth, Karl:***
Die Hoffnung auf anhaltendes Wachstum in Afrika. *1999. 28 S.*

*Nr. 62* ***Shams, Rasul:***
Entwicklungsblockaden: Neuere theoretische Ansätze im Überblick. *1999. 20 S.*

*Nr. 63* ***Wohlmuth, Karl:***
Global Competition and Asian Economic Development. Some Neo-Schumpeterian Approaches and their Relevance. *1999. 69 S.*

*Nr. 64* ***Oni, Bankole:***
A Framework for Technological Capacity Building in Nigeria: Lessons from Developed Countries. *1999. 56 S.*

*Nr. 65* ***Toshihiko, Hozumi:***
Schumpeters Theorien in Japan: Rezeptionsgeschichte und gegenwärtige Bedeutung. *1999. 22 S.*

*Nr. 66* ***Bass, Hans H.:***
Japans Nationales Innovationssystem: Leistungsfähigkeit und Perspektiven. *1999. 24 S.*

*Nr. 67* ***Sell, Axel:***
Innovationen und weltwirtschaftliche Dynamik – Der Beitrag der Innovationsforschung nach Schumpeter. *2000. 31 S.*

*Nr. 68* ***Pawlowska, Beata:***
The Polish Tax Reform. *2000. 41 S.*

*Nr. 69* ***Gutowski, Achim:***
PR China and India – Development after the Asian Economic Crisis in a 21st Century Global Economy. *2001. 56 S.*

*Nr. 70* ***Jha, Praveen:***
A note on India's post-independence economic development and some comments on the associated development discourse. *2001. 22 S.*

*Nr. 71* ***Wohlmuth, Karl:***
Africa's Growth Prospects in the Era of Globalisation: The Optimists versus The Pessimists. *2001. 71 S.*

*Nr. 72* ***Sell, Axel:***
Foreign Direct Investment, Strategic Alliances and the International Competitiveness of Nations. With Special Reference on Japan and Germany. *2001. 23 S.*

*Nr. 73* ***Arndt, Andreas:***
Der innereuropäische Linienluftverkehr - Stylized Facts und ordnungspolitischer Rahmen. *2001. 44 S.*

*Nr. 74* ***Heimann, Beata:***
Tax Incentives for Foreign Direct Investment in the Tax Systems of Poland, The Netherlands, Belgium and France. *2001. 53 S.*

*Nr. 75* ***Wohlmuth, Karl:***
Impacts of the Asian Crisis on Developing Economies – The Need for Institutional Innovations. *2001. 63 S.*

*Nr. 76* ***Heimann, Beata:***
The Recent Trends in Personal Income Taxation in Poland and in the UK. Crisis on Developing Economies – The Need for Institutional Innovations. *2001. 77 S.*

*Nr. 77* ***Arndt, Andreas:***
Zur Qualität von Luftverkehrsstatistiken für das innereuropäische Luftverkehrsgebiet. *2002. 36 S.*

*Nr. 78* ***Frempong, Godfred:***
Telecommunication Reforms – Ghana's Experience. *2002. 39 S.*

*Nr. 79* ***Kifle, Temesgen:***
Educational Gender Gap in Eritrea. *2002. 54 S.*

*Nr. 80* ***Knedlik, Tobias/ Burger, Philippe:***
Optimale Geldpolitik in kleinen offenen Volkswirtschaften – Ein Modell. *2003. 20 S.*

*Nr. 81* ***Wohlmuth, Karl:***
Chancen der Globalisierung – für wen? *2003. 65 S.*

*Nr. 82* ***Meyn, Mareike:***
Das Freihandelsabkommen zwischen Südafrika und der EU und seine Implikationen für die Länder der Southern African Customs Union (SACU). *2003. 34 S.*

*Nr. 83* ***Sell, Axel:***
Transnationale Unternehmen in Ländern niedrigen und mittleren Einkommens. *2003. 13 S.*

*Nr. 84* ***Kifle, Temesgen:***
Policy Directions and Program Needs for Achieving Food Security in Eritrea. *2003. 27 S.*

*Nr. 85* ***Gutowski, Achim:***
Standortqualitäten und ausländische Direktinvestitionen in der VR China und Indien. *2003.*
*29 S.*

*Nr. 86* ***Uzor, Osmund Osinachi:***
Small and Medium Enterprises Cluster Development in South-Eastern Region of Nigeria. *2004. 35 S.*

*Nr. 87* ***Knedlik, Tobias:***
Der IWF und Währungskrisen – Vom Krisenmanagement zur Prävention. *2004. 40 S.*

*Nr. 88* ***Riese, Juliane:***
Wie können Investitionen in Afrika durch nationale, regionale und internationale Abkommen gefördert werden? *2004. 67 S.*

*Nr. 89* ***Meyn, Mareike:***
The Export Performance of the South African Automotive Industry. New Stimuli by the EU-South Africa Free Trade Agreement? *2004. 61 S.*

*Nr. 90* ***Kifle, Temesgen:***
Can Border Demarcation Help Eritrea to Reverse the General Slowdown in Economic Growth? *2004. 44 S.*

*Nr. 91* ***Wohlmuth, Karl:***
The African Growth Tragedy: Comments and an Agenda for Action. *2004.*
*56 S.*

*Nr. 92* ***Decker, Christian/ Paesler, Stephan:***
Financing of Pay-on-Production-Models. *2004. 15 S.*

*Nr. 93* ***Knorr, Andreas/ Žigová, Silvia:***
Competitive Advantage Through Innovative Pricing Strategies – The Case of the Airline Industry. *2004. 21 S.*

*Nr. 94* ***Sell, Axel:***
Die Genesis von Corporate Governance. *2004. 18 S.*

*Nr. 95* **Yun, Chunji:**
Japanese Multinational Corporations in East Asia: Status Quo or Sign of Changes? *2005. 57 S.*

*Nr. 96* **Knedlik, Tobias:**
Schätzung der Monetären Bedingungen in Südafrika. *2005. 20 S.*

*Nr. 97* **Burger, Philippe:**
The transformation process in South Africa: What does existing data tell us? *2005. 18 S.*

*Nr. 98* **Burger, Philippe:**
Fiscal sustainability: the origin, development and nature of an ongoing 200-year old debate. *2005. 32 S.*

*Nr. 99* **Burmistrova, Marina A.:**
Corporate Governance and Corporate Finance: A Cross-Country Analysis. *2005. 16 S.*

*Nr. 100* **Sell, Axel:**
Alternativen einer nationalstaatlichen Beschäftigungspolitik. *2005. 41 S.*

*Nr. 101* **Bass, Hans-Heinrich:**
KMU in der deutschen Volkswirtschaft: Vergangenheit, Gegenwart, Zukunft. *2006. 19 S.*

*Nr. 102* **Knedlik, Tobias/ Kronthaler, Franz:**
Kann ökonomische Freiheit durch Entwicklungshilfe forciert werden? Eine empirische Analyse. *2006. 18 S.*

*Nr. 103* **Lueg, Barbara:**
Emissionshandel als eines der flexiblen Instrumente des Kyoto-Protokolls. Wirkungsweisen und praktische Ausgestaltung. *2007. 32 S.*

*Nr. 104* **Burger, Phillipe:**
South Africa economic policy: Are we moving towards a welfare state? *2007. 31 S.*

*Nr. 105* **Ebenthal, Sebastian:**
Messung von Globalisierung in Entwicklungsländern: Zur Analyse der Globalisierung mit Globalisierungsindizes. *2007. 36 S.*

*Nr. 106* **Wohlmuth, Karl:**
Reconstruction of Economic Governance after Conflict in Resource-Rich African Countries: Concepts, Dimensions and Policy Interventions. *2007. 42 S.*

*Nr. 107* **Smirnych, Larissa:**
Arbeitsmarkt in Russland - Institutionelle Entwicklung und ökonomische Tendenzen. *2007. 34 S.*

*Nr. 108* ***Kifle, Temesgen***:
Africa Hit Hardest by Global Warming Despite its Low Greenhouse Gas Emissions. *2008. 22 S.*
.
*Nr. 109* ***Alabi, Reuben Adeolu:***
Income Sources Diversification: Empirical Evidence from Edo State, Nigeria. *2008. 54 S.*

*Nr. 110* ***Jantzen, Katharina***
Eine Einführung in Regulierungssysteme für die Fischerei im Nordatlantik am Beispiel der Fanggründe vor Island und Neufundland, *2008. 32 S.*

*Nr. 111* ***Ebenthal, Sebastian:***
Mexiko im Kontext der Globalisierung -Ergebnisse eines Globalisierungsindex für Entwicklungsländer, *2008. 72 S.*

*Nr. 112* ***Rieckmann, Johannes:***
Two Dynamic Export Sectors (Diamonds, Tourism) in Namibia and Botswana: Comparison of Development Strategies. *2008. 48 S.*

*Nr. 113* ***Albers, Harm:***
Globalisierung und Wachstum: Die Konvergenzdebatte – dargestellt mit Bezug auf Veröffentlichungen dreier Wissenschaftler. *2008. 35 S.*

*Nr. 114* ***Alabi Reuben Adeolu:***
Income distribution and accessibility to primary and secondary schools in Nigeria. *2009. 54 S.*

*Nr. 115* ***Wohlmuth, Karl:***
World Economic Crisis - Globalization - Global Employment Crisis - Challenge for the Reform of Labour and Employment Policies in Japan and in Germany, *2009.55 S.*

*Nr.116* ***Temesgen, Kifle:***
Motivation of Remittance Senders: Evidence from Eritrean Immigrants in German, *2009. 38 S.*

*Nr. 117* ***Wohlmuth , Karl:***
Emerging Markets - Die afrikanischen Staaten in der Weltwirtschaft, *2009. 13 S.*

*Nr. 118* ***Uzor, Osmund Usinachi:***
The ISMED Model and Public-Private Partnerships in the Promotion of Agro-Industrial Clusters in Nigeria. *2010. 37 S.*

*Nr. 119* ***Alabi, Reuben Adeolu:***
Progressivity of Education Spending in Nigeria. *2010. 56S.*

*Nr. 120* ***Alabi, Reuben Adeolu:***
Redistribution of Education and Redistributive Effects of Education Spending in Nigeria. *2010. 82 S.*

*Nr. 121* ***Alabi, Reuben Adeolu:***
Marginal Benefit Incidence of Public Spending on Health Services in Nigeria. *2011. 53 S.*

*Nr. 122* ***Wohlmuth, Karl:***
Die Auswirkungen der globalen Finanz- und Wirtschaftskrise 2008/2009 in Afrika. Lehren für die nationale, regionale und internationale Wirtschaftspolitik, 2012. 51 S.

*Nr. 123* ***Wohlmuth, Karl:***

Global Food Price Increases and Repercussions on Africa: Which Public Policy Interventions are really appropriate? 2012. 20 S.