

EUROPEAN MASTER'S PROGRAMME IN HUMAN RIGHTS AND DEMOCRATISATION 2011 / 2012

The World Food Casino

Excessive Speculation From a Human Rights Perspective

E.MA Thesis by Jan-Christian Nicolas Niebank

Supervised by Prof. Jean-Paul Jacqu , Universit  de Strasbourg

ABSTRACT

The gap between the poor and the prosperous is getting wider. Some people suffer from hunger and die of starvation, while others make unthinkable amounts of profits. What if there is a link between the prosperity of one group of people and the misery of other more vulnerable groups? This is exactly the question which trading of food commodity derivatives provokes. This thesis argues that besides ethical considerations there are obligations under international law that bind states to ensure compliance with human rights, *inter alia* the right to food, by regulating markets in such a way that excessive speculation is prevented. In support of the argumentation a causal link between speculation and rising prices is discussed and the applicability of the precautionary principle is demonstrated. Based on the adverse effects that high food prices cause in developing countries, extraterritorial obligations are constructed. Finally, policy options are suggested to regulate food commodity markets in accordance with international human rights standards.

Keywords: excessive speculation, agricultural commodities, precautionary principle, food security, right to food, obligation to regulate, extraterritorial obligations

L'écart entre pauvreté et prospérité s'agrandit de jour en jour. Pendant que certaines personnes souffrent de faim et meurent de famine, d'autres réalisent une quantité de profit impensable. Et s'il existait une relation entre la prospérité d'une catégorie de personnes et la misère d'un autre groupe plus vulnérable ? Cette question est soulevée inévitablement par le problème des transactions de matières premières alimentaires. Cette thèse soutient l'idée qu'au-delà de certaines considérations éthiques, il existe un certain nombre d'obligations selon le droit international qui sollicitent les états à garantir la conformité aux droits de l'Homme, notamment le droit à l'alimentation, en régulant les marchés pour prévenir la spéculation excessive sur les denrées alimentaires. D'autre part, le lien de causalité entre la spéculation et l'augmentation des prix va être démontré, ainsi que l'applicabilité du principe de précaution. Ensuite, se basant sur les effets indésirables que causent les prix alimentaires élevés dans les pays en

développement, les obligations extraterritoriales seront établies. Pour finir, différentes options stratégiques seront proposées pour réguler les marchés des denrées alimentaires conformément aux normes internationales relatives aux droits de l'Homme.

Mots-clés: spéculation excessive, produits agricoles, principe de précaution, sécurité alimentaire, droit à l'alimentation, obligation de réglementer, obligations extraterritoriales.

TABLE OF CONTENTS

Introduction	1
Chapter 1: The excessiveness of speculation	5
1. The history of speculation.....	5
2. The relationship between speculation and price volatility.....	13
a) What is Price Volatility?	13
b) The controversial relationship between excessive speculation and price volatility	14
aa) The arguments	14
(1) Contra	14
(2) Pro	18
bb) Interim results	26
c) Overcoming the controversy: The precautionary principle	27
aa) International law	28
bb) European Union Law	29
d) Interim Conclusions.....	31
Chapter 2: The implications of excessive speculation for food prices and consumers	32
1. The extent of transmission between international and local food prices	32
2. The consequences of high transmission.....	36
a) Country-level impacts	37
b) Household-level impacts	38
c) Impacts on the United Nations World Food Programme	43
d) Interim Conclusions	43
Chapter 3: A human rights-based approach to excessive speculation	44
1. The added-value of a human rights based approach.....	44
2. The right to food.....	48
a) The international legal basis	48
b) The normative content	51
c) The interconnectedness of human rights	52
aa) Economics, social and cultural rights as a different category of right?	52
bb) The effects on other economics, social and cultural rights	54

d) The corresponding obligations	57
aa) The addressees of obligations related to the right to food	57
bb) The content of State obligations	61
3. The implications for excessive speculation on agricultural commodity markets	63
4. Interim Conclusions	67
Chapter 4: The extraterritorial obligation to prevent excessive speculation	68
1. The insufficiency of domestic human rights obligations	68
2. The fundamental ideas behind extraterritorial obligations	70
a) The universality of human rights	71
b) The principle of non-discrimination	72
c) Interim conclusions	73
3. The legal foundations of extraterritorial obligations	73
a) General	74
b) Right to food.....	76
4. The extraterritorial obligation to take measures against excessive speculation....	77
a) The FAO Voluntary Guidelines	78
b) International Environmental Law	79
c) Re-Substantiation of Extraterritorial Obligations through the Maastricht Principles	79
5. Interim conclusions.....	84
Conclusion	85

Acknowledgement

It is with immense gratitude that I acknowledge the support and help of my supervisor, Professor Jean-Paul Jacqu . Furthermore, I would like to thank the UN Special Rapporteur on the Right to Food, Prof. Olivier De Schutter, and UNCTAD chief economist Dr. Heiner Flassbeck for their availability, expertise and patience with my interview questions.

GLOSSARY¹

B

Board of Trade: Any organised exchange or other trading facility for the trading of futures and/or option contracts.

Buyer: A market participant who takes a long futures position or buys an option. An option buyer is also called a taker, holder, or owner.

C

Cash Settlement: A method of settling futures options and other derivatives whereby the seller (or short) pays the buyer (or long) the cash value of the underlying commodity or a cash amount based on the level of an index or price according to a procedure specified in the contract. Also called Financial Settlement. Compare to physical delivery.

Clearing: The procedure through which the clearing organisation becomes the buyer to each seller of a futures contract or other derivative, and the seller to each buyer for clearing members.

Clearing Organisation: An entity through which futures and other derivative transactions are cleared and settled. It is also charged with assuring the proper conduct of each contract's delivery procedures and the adequate financing of trading. A clearing organisation may be a division of a particular exchange, an adjunct or affiliate thereof, or a freestanding entity. Also called a clearing house, multilateral clearing organisation, or clearing association. See Derivatives Clearing Organisation.

Commercial: An entity involved in the production, processing, or merchandising of a commodity.

Commodity: (1) A commodity, as defined in the Commodity Exchange Act, includes the agricultural commodities enumerated in Section 1a(4) of the Commodity Exchange Act, 7 USC 1a(4), and all other goods and articles, except onions as provided in Public Law 85-839 (7 USC 13-1), a 1958 law that banned futures trading in onions, and all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in. (2) A physical commodity such as an agricultural product or a natural resource as opposed to a financial instrument such as a currency or interest rate.

Commodity Exchange Act: The Commodity Exchange Act, 7 USC 1, et seq., provides

¹ CFTC Glossary - A Guide to the Language of the Futures Industry

for the federal regulation of commodity futures and options trading and was enacted in 1936.

Commodity Futures Trading Commission (CFTC): The Federal regulatory agency established by the Commodity Futures Trading Act of 1974 to administer the Commodity Exchange Act.

Commodity Index: An index of a specified set of (physical) commodity prices or commodity futures prices.

Commodity Index Fund: An investment fund that enters into futures or commodity swap positions for the purpose of replicating the return of an index of commodity prices or commodity futures prices.

Commodity Index Swap: A **swap** whose cash flows are intended to replicate a commodity index.

Commodity Index Trader: An entity that conducts futures trades on behalf of a commodity index fund or to hedge commodity index swap positions.

Contract: (1) A term of reference describing a unit of trading for a commodity future or option or other derivative; (2) an agreement to buy or sell a specified commodity, detailing the amount and grade of the product and the date on which the contract will mature and become deliverable.

Crop Year: The time period from one harvest to the next, varying according to the commodity (e.g., July 1 to June 30 for wheat; September 1 to August 31 for soybeans).

D

Daily Price Limit: The maximum price advance or decline from the previous day's settlement price permitted during one trading session, as fixed by the rules of an exchange.

Delivery: The tender and receipt of the actual commodity, the cash value of the commodity, or of a delivery instrument covering the commodity (e.g., warehouse receipts or shipping certificates), used to settle a futures contract.

Derivative: A financial instrument, traded on or off an exchange, the price of which is directly dependent upon (i.e., "derived from") the value of one or more underlying securities, equity indices, debt instruments, commodities, other derivative instruments, or any agreed upon pricing index or arrangement (e.g., the movement over time of the Consumer Price Index or freight rates). They are used to hedge risk or to exchange a floating rate of return for fixed rate of return. Derivatives include futures, options, and swaps. For example, futures contracts are derivatives of the physical contract and options on futures are derivatives of futures contracts.

Derivatives Clearing Organisation: A clearing organisation or similar entity that, in respect to a contract (1) enables each party to the contract to substitute, through novation or otherwise, the credit of the derivatives clearing organisation for the credit of the parties; (2) arranges or provides, on a multilateral basis, for the settlement or netting of obligations resulting from such contracts; or (3) otherwise provides clearing services or arrangements that mutualise or transfer among participants in the derivatives clearing organisation the credit risk arising from such contracts.

E

Efficient Market: In economic theory, an efficient market is one in which market prices adjust rapidly to reflect new information. The degree to which the market is efficient depends on the quality of information reflected in market prices. In an efficient market, profitable arbitrage opportunities do not exist and traders cannot expect to consistently outperform the market unless they have lower-cost access to information that is reflected in market prices or unless they have access to information before it is reflected in market prices.

Electronic Trading Facility: A trading facility that operates by an electronic or telecommunications network instead of a trading floor and maintains an automated audit trail of transactions.

Exchange: A central marketplace with established rules and regulations where buyers and sellers meet to trade futures and options contracts or securities. Exchanges include designated contract markets and derivatives transaction execution facilities.

Exchange Rate: The price of one currency stated in terms of another currency.

Expiration Date: The date on which an option contract automatically expires; the last day an option may be exercised.

F

Futures Contract: An agreement to purchase or sell a commodity for delivery in the future: (1) at a price that is determined at initiation of the contract; (2) that obligates each party to the contract to fulfill the contract at the specified price; (3) that is used to assume or shift price risk; and (4) that may be satisfied by delivery or offset.

Futures Price: (1) Commonly held to mean the price of a commodity for future delivery that is traded on a futures exchange; (2) the price of any futures contract.

H

Hedge Fund: A private investment fund or pool that trades and invests in various assets such as securities, commodities, currency, and derivatives on behalf of its clients, typically wealthy individuals. Some commodity pool operators operate hedge funds.

Hedger: A trader who enters into positions in a futures market opposite to positions held in the cash market to minimise the risk of financial loss from an adverse price change; or who purchases or sells futures as a temporary substitute for a cash transaction that will occur later. One can hedge either a long cash market position (e.g., one owns the cash commodity) or a short cash market position (e.g., one plans on buying the cash commodity in the future).

High Frequency Trading: Computerised or algorithmic trading in which transactions are completed in very small fractions of a second.

I

Initial Margin: Customers' funds put up as security for a guarantee of contract fulfillment at the time a futures market position is established.

L

Liquidation: The closing out of a long position. The term is sometimes used to denote closing out a short position, but this is more often referred to as covering.

Liquid Market: A market in which selling and buying can be accomplished with minimal effect on price.

Long: (1) One who has bought a futures contract to establish a market position; (2) a market position that obligates the holder to take delivery; (3) one who owns an inventory of commodities. See Short.

M

Manipulation: Any planned operation, transaction, or practice that causes or maintains an artificial price. Specific types include corners and squeezes as well as unusually large purchases or sales of a commodity or security in a short period of time in order to distort prices, and putting out false information in order to distort prices.

Margin: The amount of money or collateral deposited by a customer with his broker, by a broker with a clearing member, or by a clearing member with a clearing organisation. The margin is not partial payment on a purchase. Also called Performance Bond. (1) Initial margin is the amount of margin required by the broker when a futures position is opened; (2) Maintenance margin is an amount that must be maintained on deposit at all times. If the equity in a customer's account drops to or below the level of maintenance margin because of adverse price movement, the broker must issue a margin call to restore the customer's equity to the initial level. Exchanges specify levels of initial margin and maintenance margin for each futures contract, but futures commission merchants may require their customers to post margin at higher levels than those specified by the exchange. Futures margin is determined by the SPAN margining

system, which takes into account all positions in a customer's portfolio.

O

Over-the-Counter (OTC): The trading of commodities, contracts, or other instruments not listed on any exchange. OTC transactions can occur electronically or over the telephone.

P

Physical: A contract or derivative that provides for the physical delivery of a commodity rather than **cash settlement**.

Physical Delivery: A provision in a futures contract or other derivative for delivery of the actual commodity to satisfy the contract.

Position Limit: The maximum position, either net long or net short, in one commodity future (or option) or in all futures (or options) of one commodity combined that may be held or controlled by one person as prescribed by an exchange and/or by the CFTC.

Price Discovery: The process of determining the price level for a commodity through the interaction of buyers and sellers and based on supply and demand conditions.

S

Settlement: The act of fulfilling the delivery requirements of the futures contract.

Short: (1) The selling side of an open futures contract; (2) a trader whose net position in the futures market shows an excess of open sales over open purchases.

Speculative Bubble: A rapid run-up in prices caused by excessive buying that is unrelated to any of the basic, underlying factors affecting the supply or demand for a commodity or other asset. Speculative bubbles are usually associated with a "bandwagon" effect in which speculators rush to buy the commodity (in the case of futures, "to take positions") before the price trend ends, and an even greater rush to sell the commodity (unwind positions) when prices reverse.

Speculator: In commodity futures, a trader who does not hedge, but who trades with the objective of achieving profits through the successful anticipation of price movements.

Spot: Market of immediate delivery of and payment for the product.

Spot Commodity: (1) The actual commodity as distinguished from a futures contract; (2) sometimes used to refer to cash commodities available for immediate delivery.

Spot Price: The price at which a physical commodity for immediate delivery is selling at a given time and place.

Swap: In general, the exchange of one asset or liability for a similar asset or liability for the purpose of lengthening or shortening maturities, or otherwise shifting risks. This may entail selling one securities issue and buying another in foreign currency; it may entail buying a currency on the spot market and simultaneously selling it forward. Swaps also may involve exchanging income flows; for example, exchanging the fixed rate coupon stream of a bond for a variable rate payment stream, or vice versa, while not swapping the principal component of the bond. Swaps are generally traded over-the-counter.

U

Underlying Commodity: The cash commodity underlying a futures contract. Also, the commodity or futures contract on which a commodity option is based, and which must be accepted or delivered if the option is exercised.

V

Volatility: A statistical measurement (the annualised standard deviation of returns) of the rate of price change of a futures contract, security, or other instrument underlying an option.

Volume: The number of contracts traded during a specified period of time. It is most commonly quoted as the number of contracts traded, but for some physical commodities may be quoted as the total of physical units, such as bales, bushels, or barrels.

THE WORLD FOOD CASINO - EXCESSIVE SPECULATION FROM A HUMAN RIGHTS PERSPECTIVE

INTRODUCTION

Approximately one billion people² worldwide are currently suffering from hunger on a daily basis, making the right to food one of the most violated human rights. The reason why they are unable to feed themselves is the lack of necessary financial resources to purchase the food they need. As a consequence malnutrition and the illnesses connected with it remain one of the main causes of death in more than 40 countries.³ The number of hungry people has increased from 820 million in 1996, 854 million in 2005 and 923 million at the beginning of 2008.⁴ The most recent figure of 925 million in 2010 showed a slight decrease from 1.023 billion in 2009.⁵ According to World Bank estimates of 2011, 44 million people have fallen into extreme poverty, living on less than 1,25\$ a day, as a result of food prices rising by 36% in 2010/2011.⁶ In April 2011 World Bank President Robert Zoellick warned that rising food prices have created a "toxic brew of real pain contributing to social unrest".⁷ Although the Food Price Index, which measures the monthly change in international food prices, recently showed a decline in prices⁸, prices remain high and the general trend towards rising food prices is set to continue.⁹

All major agricultural commodities being traded at the international level and essential

² The Food and Agriculture Organization of the United Nations (hereinafter FAO) currently revises its methodology for measuring hunger. See: FAO, United Nations World Food Programme, International Fund for Agricultural Development 2011(a), The State of Food Insecurity in the World, p. 10.

³ Schumann, 2011, Hunger Makers, p. 12.

⁴ See FAO, 2009(b), The State of Food Insecurity in the World; FAO, 2010, The State of Food Insecurity in the World; FAO/WFP/IFAD, 2011(a), The State of Food Insecurity in the World.

⁵ De Schutter, 2011(b), p. 305.

⁶ Ivanic, Martin, Zaman, 2011, p. 23.

⁷ Giles, Chris, World Bank chief warns on food threat, Financial Times, 14 April 2011.

⁸ <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/>

⁹ OECD-FAO, 2011, Agricultural Outlook 2011-2020, p. 24.

for human nutrition, such as milk, cereals and sugar, were at least twice as expensive in spring 2011 than 10 years ago.¹⁰ Prices for the three most important grains, wheat, corn and rice, were on average 150 percent higher than they had been in 2000.¹¹ Recently Germany's aid organisation *Welthungerhilfe* has warned that the world was heading "full speed into the next famine."¹² Whenever so called natural disasters like droughts occur, the problem of hunger temporarily shifts to the centre of public attention. However, there are other factors threatening the right to food that deserve equal attention. One of these is food price volatility on food commodity markets which increasingly threatens the enjoyment of human rights, most notably the right to food. There is a constant risk: a repeat of the 2007-2008 spike in food prices.¹³

While the world's most vulnerable are adversely affected by record price swings, "the other side of the world society was listing a new record as well".¹⁴ Prior to and in parallel to the food crisis in 2007-2008, investors, including banks, pension funds and insurance companies, have expanded their activities on agricultural commodity markets. By the end of March 2011 investors had put more than 600 billion dollars in bets on commodities hoping to benefit from increasing prices.¹⁵ Almost one third of the money was invested in food commodities, an area which Barclays Capital characterised as the "best performing sector".¹⁶ In Spring 2008 Deutsche Bank tried to attract clients for one of its investment funds by asking "Do you enjoy rising prices?" and remarked "Everybody talks about commodities – with the Agriculture Euro Fund you can benefit from the increase in value of the seven most important agricultural commodities."¹⁷ All this invites the notion that excessive speculation may be a key factor in driving up food prices.

Derivative trading has become more and more important, since it proved to be one of

¹⁰ FAO Food Price Index, May 2011, <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/>

¹¹ Schumann, 2011, *Hunger Makers*, p. 12.

¹² *Welthungerhilfe*, 2011, *Brennpunkt: Nahrungsmittelpreise*.

¹³ Blas, Javier, Oil seed rise sparks new food price fear, *Financial Times*, 30 April 2012; Food Inflation feared as soya prices soar, *Financial Times*, 29 April 2012.

¹⁴ Schumann, 2011, *Hunger Makers*, p. 13.

¹⁵ *Ibidem*.

¹⁶ Barclays Capital, 2011, *Commodities Research*, p. 4.

¹⁷ Wahl, 2011, p. 12

the most lucrative fields of action for financial institutions. A derivative is not based on an exchange of tangible assets, such as goods or money, but rather is a financial contract with a value linked to the expected future price movements of the underlying asset.¹⁸ The main characteristic of this kind of financial contract is thus its disconnectedness from physical markets, which has, as critics claim, ultimately triggered the collapse of banks and the worst financial crisis in human history.¹⁹ Much attention has been devoted to the betting on the value of subprime mortgages or foreign currency values, where the disastrous consequences could be witnessed around the globe. The financial crisis has been an economic catastrophe of alarming proportions for millions around the world, driving many countries into recession and causing increased rates of unemployment, deteriorating public debts and consequently leading to regrettable curtailments in the field of essential public services. Yet, there is another neglected field where speculative behaviour represents a threat to the very survival of people: food commodities.²⁰

Against the backdrop of the global rise in commodity prices and food insecurity affecting almost one billion worldwide, the boom of investment into food commodities needs to be questioned. Can food and agricultural commodities be traded just like any other product? Does a full commitment to the human right to food not imply a responsibility of the international community to secure respect for this human right? As Harald Schumann has pointed out in his report for Foodwatch called "The Hunger-Makers", it is also relevant to ask what is the economic sense in trading volumes of foodstuffs each day that exceed the total global consumption of grain several times over.²¹ Also, it is worthwhile to consider who ultimately pays the profits of investors, if not consumers. This leads to the question whether excessive speculation causes price volatility or at least amplifies and aggravates the effects of other factors.

There is a considerable amount of literature dealing with the most recent food crisis, and also various contributions exist which analyze the impact of speculation on price volatility. Yet, little research has been carried out to genuinely approach the issue from a

¹⁸ Jones, Tim, 2010, p. 4.

¹⁹ Ibidem.

²⁰ Ibidem.

²¹ Schumann, 2011, Hunger Makers, p. 15.

human rights perspective, asking what obligations might bind states to intervene and regulate markets to ban excessive speculation. The central research question, which this study seeks to answer, therefore is: **Does international human rights law oblige states to intervene for the purpose of regulating speculation?** There are several scientific obstacles that need to be overcome before being able to deal with the potential policy options to react to excessive speculation in order to protect the right to food.

First it needs to be proven that speculation is a factor leading to price volatility, since in the past, efforts to tackle the problem of speculation on agricultural commodity markets have often been hampered and undermined by the denial of a causal link between speculation and food volatility. **Chapter 1** of this study aims to provide solid evidence establishing the role of derivative trading in causing unstable food prices. While it does not claim that food speculation is the only factor, it shows that speculation "rides on the back of these underlying changes, amplifying their impact on price".²² It also discusses the necessity of proving the role of speculation as a "*conditio sine qua non*" and suggests that a reversal of the burden of proof analogous to the precautionary principle might render this discussion a purely academic matter. **Chapter 2** outlines the adverse human rights impacts that can be directly associated with food price volatility. Establishing a causal relationship between price volatility and detrimental effects on the right to food poses no major problem. The effects of the food crisis of 2007-08 are well documented. Millions suffered from hunger and malnutrition and riots erupted as a consequence of these circumstances. Focusing on the implications for already marginalised and vulnerable groups, the short term as well as the long term damages of food deprivation are reviewed. **Chapter 3** argues that a human-rights based approach is required to deal with the problem in a sustainable way. It shows the advantages of this method, recalls the existing international and regional legal framework, the normative content of the right to food, names its duty-bearers, and discusses their obligations. After this, **Chapter 4** deals with the challenge posed by the divergence between affectedness and capacity to act. In wealthy industrialised countries consumers spend less than 10 percent of their income on food, and commodities contribute only a fraction

²² Jones, Tim, 2010, p. 20

to retail prices. Therefore price volatility is not significant for most people. The situation is very different in developing countries where two billion people spend a large proportion of their incomes on food and other basic commodities. In these countries an increase in prices leads to severe restrictions to their lives, and for many it means being confronted with illness and death.²³ Thus, this chapter constructs extraterritorial obligations, as recently re-proclaimed and substantiated in the Maastricht Guidelines, for states, who are in a position to create regulations, but are not detrimentally affected within their own jurisdiction. Only then, the last step of identifying appropriate policy measures can be taken. As part of the **conclusion** it is addressed how compliance with the right to food can be assured. Therefore the need to take concrete action is emphasised and potential solutions are discussed. The justiciability of the right to food remains another crucial challenge, but is beyond the scope of this paper.²⁴

CHAPTER ONE: THE EXCESSIVENESS OF SPECULATION

1. THE HISTORY OF SPECULATION

In order to discuss the role that speculation plays concerning the formation of prices, it is first necessary to review the history of speculation on commodity markets and to define what the main contemporary characteristics of speculative market behaviour are. A historical review helps to grasp what speculation is and what actors engage in speculation. It also reveals what the interests of the different market participants are. The historical developments are analyzed focusing on the United States, firstly due to the important role of the Chicago Board of Trade (CBT) and because this focus exemplifies the global debate on speculation in commodity markets and state regulation.

Agricultural commodities are the central subject around which all analyses, discussions and conclusions of this study evolve. Commodities can be defined as “goods of a fungible nature that are capable of being delivered, including metals and their ores and

²³ Schumann, 2011, *Hunger Makers*, p. 12.

²⁴ For an in-depth analysis see: Borghi and Postiglione Blommestein, 2006.

alloys, agricultural products, and energy such as electricity”.²⁵ The most important agricultural commodities being traded on the financial markets are wheat, maize, sugar, cotton and soybean (oil).²⁶

In the mid-19th century so called **future contracts** were created for agricultural products traded in the United States.²⁷ These standardised contracts, which allowed market participants to agree on a guaranteed price for their next harvest, remain an important instrument to "hedge" risks, but presently tend to be only available to larger, wealthier farmers.²⁸ Initially, they were conceived for the buying and selling of raw materials expiring on fixed dates in the future.²⁹ Above all, their purpose was to benefit farmers by giving them an increased certainty of income by transferring their risks to someone else. Likewise, prospective purchasers such as mills and bread manufacturers were able to plan their production and calculate their costs based on assured amounts and prices.³⁰ Future contracts are generally closed by the neutralisation of the existing positions and the financial settlement of the price difference between long (buyer) and short positions (seller).

It is important to take note of the crucial role of yet another actor involved in this type of contract. The exchange itself, a private company offering a self-regulated trading venue³¹, is the third and central contracting party and its responsibility is to ensure compliance with the terms of the contracts by buyers and sellers. In return, buyers and sellers have to deposit as security a certain amount of money (*margins*) in an account set up for this purpose by the exchange.³² Generally the buyer of a futures contract is required to deposit between eight to twelve per cent of the nominal value of the commodity in order to compensate for unforeseen price fluctuations.³³ It quickly

²⁵ Regulation (EC) No. 1287/2006, Article 2(1).

²⁶ Kerckhoffs, van Os, Vander Stichele, 2010, p. 2,
<http://europeansforfinancialreform.org/en/system/files/FinancingFood.pdf>

²⁷ Jones, Tim, 2010, p. 8.

²⁸ Ibidem.

²⁹ Schumann, 2011, Hunger Makers, p. 17.

³⁰ Schumann, 2011, Hunger Makers, p. 21.

³¹ Kerckhoffs, van Os, Vander Stichele, 2010, p. 4.

³² Schumann, 2011, Hunger Makers, p. 21.

³³ Ibidem.

became apparent that futures contracts are prone to manipulation and excessive speculation. This is the result of the number of traded contracts being completely independent from the quantities of existing physical goods. Right from the start of its existence, markets participants were attracted which engaged in commodity futures markets solely for financial reasons and had no interest in the physical production, processing or retailing of the physical good itself.³⁴ Betting on price fluctuation became attractive and future contracts were bought to create an artificial shortage and drive prices up.³⁵

However, in the aftermath of the 1929 Wall Street Crash, the Roosevelt administration in the United States, decided to intervene and introduced measures aimed at the prevention of price volatility caused by excessive speculation. The Securities Act of 1933, the Security Exchange Act of 1934 and the Commodity Exchange Act of 1936 were a direct reaction to the undesired effects of speculation. An efficient supervision of commodity exchanges was established. Most prominently, so called *position limits* were introduced, placing limits on the amount of derivatives which can be traded in a particular market.³⁶ All businesses and traders which were not themselves engaged in the physical grain trade were prohibited from purchasing more than 500 standardised contracts per type of grain.³⁷

Later, a new form of futures contracts developed that were purely finance-related and designed to guarantee a set currency exchange or interest rate for producers and business enterprises for a fixed date in the future. Fees and premiums arising from this new instrument soon became one of the major sources of income for the financial industry. The value of these contracts was derived from the underlying exchange rates and loan interests. Therefore they are referred to as derivatives.³⁸ The establishment of the corresponding markets was accompanied by an electronic linkage of exchanges and

³⁴ Schumann, 2011, *Hunger Makers*, p. 21.

³⁵ *Ibidem*.

³⁶ Jones, Tim, 2010, p. 8.

³⁷ Schumann, 2011, *Hunger Makers*, p. 22.

³⁸ Schumann, 2011, *Hunger Makers*, p. 23.

market participants beyond all territorial borders. This caused an ever increasing liquidity which was generated by pension funds, insurances, endowments and savings in various forms.³⁹ This "global cyberspace of world finance",⁴⁰ preceding the time of the internet becoming a mass medium, led to fast flows of enormous amounts of capital between the different financial centres, exchanges, stocks, bonds and currencies. Schumann concludes that "since then the valuation of securities and entire economies has become increasingly subject to the laws of mass psychology rather than rational economic calculation."⁴¹ Derivative trading is very suitable for speculation, because high profit (and losses) can be achieved with relatively low amounts of money invested. Until the end of the 1990s food commodity prices corresponded to the expected harvests or the demand in oil. This changed when stock exchanges gradually became a less lucrative target of investment and the financial industry started advertising for investment in commodities.

A newly introduced offer called **index fund** consisted of a package of securities compiled in one basket, in which each security is given a certain weighting.⁴² The first index, the Goldman Sachs Commodity Index, was already created in 1991 and included 25 different commodities from aluminium to sugar cane.⁴³ Investors are encouraged to bet on the development of the overall future price development of their compilation, while it was the role of Goldman bankers to manage their capital and buy futures for commodities on their behalf according to their weighting in the index.⁴⁴ This results in the value of the capital investment being determined by the development of future contracts prices.⁴⁵ Other major players of the financial industry, *inter alia*, AIG, Barclays, Morgan Stanley, UBS and Deutsche Bank followed the example and set up index funds as well.⁴⁶ Thus, the character of commodity markets was changed fundamentally. Price discovery and hedging were no longer the only motivating factors

³⁹ Schumann, 2011, Hunger Makers, p. 23.

⁴⁰ Ibidem.

⁴¹ Ibidem.

⁴² Schumann, 2011, Hunger Makers, p. 27.

⁴³ Ibidem.

⁴⁴ Ibidem.

⁴⁵ Ibidem.

⁴⁶ Schumann, 2011, Hunger Makers, p. 28.

behind engaging in commodity futures trade. Rather, derivatives in food expanded massively and index funds were created allowing institutional investors to "invest in the price of food, as if it were an asset like shares."⁴⁷ This was due to marketing and advertising commodities as crisis-proof securities accounts and a tool to hedge against inflation. Quickly, investment in commodities was seen as a "portfolio enhancer".⁴⁸ The UN Special Rapporteur on the Right to Food Olivier De Schutter writes "the reason for this was because other markets dried up one by one: the dotcoms vanished at the end of 2001, the stock market soon after, and the US housing market in August 2007. As each bubble burst, these large institutional investors moved into other markets, each traditionally considered more stable than the last. Strong similarities can be seen between the price behaviour of food commodities and other refuge values, such as gold."⁴⁹

The introduction of index funds was accompanied by an increasing deregulation in the United States. In the 1990s and early 2000s these Acts of the Roosevelt era were amended following intensive lobbying by the financial industry.⁵⁰ The deregulation of agricultural markets was advocated as bringing more liquidity and being a benefit for all market participants. This is doubtful, since speculators tend to leave the markets when they are most needed.⁵¹ As a result radical changes took place. For instance, Goldman Sachs succeeded in negotiating exemptions from the limits on trading for many commodity speculators. The limitation of 600 contracts per trading member and grain type was identified as an obstacle to profit and hence gradually removed.⁵² Quickly the figure increased to 22,000 for corn, 10,000 for soybeans, and 6,500 for wheat.⁵³ Bankers still were not satisfied with the level of deregulation and hence identified loopholes dating back to the founding of the Commodity Futures Trading Commission (CFTC). Soon Goldman Sachs and other providers of index swap trading, among them

⁴⁷ Jones, Tim, 2010, p. 9.

⁴⁸ Robison, Loder, Bjerga, Amber Waves of Pain, Business Week, 22 July 2010.

⁴⁹ De Schutter, 2010(a), p. 6.

⁵⁰ Taibbi, The Great American Bubble Machine, Rolling Stone, 9-23 July 2009.

⁵¹ Interview Flassbeck, 1 May 2012.

⁵² Schumann, 2011, Hunger Makers, p. 33.

⁵³ Ibidem.

Morgan Stanley, Meryll Lynch and Citibank, were able to benefit from even more lucrative exemptions.⁵⁴ Consequently, position limits had lost their significance. Subsequently more and more private investors were attracted to the commodity markets. The construction of the PowersharesDB in 2004, the first open commodity fund, further contributed to this trend.⁵⁵

A strong indicator for today's presence of speculation on food commodity markets is the capital involvement reflected by the number of derivative contracts which increased by more than 500 percent between 2002 and mid-2008.⁵⁶ A study conducted by Lehman Brothers even noticed an increase by 1,900% in the volume of index fund speculation between 2003 and March 2008, from 13 billion to 260 billion US dollars.⁵⁷

It is important to be aware of the small share that publicly traded commodity-linked securities represent in the overall market.⁵⁸ In parallel to the developments at the exchange platforms, banks had started trading similar contracts directly with their customers and among each other. This form of bilateral trading between financial actors without the involvement of public exchanges is called over-the-counter trade (OTC).⁵⁹ Commodity departments in banks fulfil an essential role for all parties involved in commodity markets. Like exchanges they engage in hedging prices for buyers and sellers alike according to their specific needs.⁶⁰ The volume of OTC trade with derivatives is significantly larger than that of the public commodity futures markets.⁶¹ OTC trade is very opaque, since centralised information is lacking completely. Therefore, no data is available on what bank takes what risks.⁶² The banks involved have an enormous information advantage over all other market participants as well as

⁵⁴ Schumann, 2011, *Hunger Makers*, p. 33.

⁵⁵ *Ibidem*.

⁵⁶ UNCTAD, 2009(b), Chapter II: The Financialization of Commodity Markets.

⁵⁷ Wahl, Peter, 2009, p. 11.

⁵⁸ Schumann, 2011, *Hunger Makers*, p. 34.

⁵⁹ Schumann, 2011, *Hunger Makers*, p. 32.

⁶⁰ Schumann, 2011, *Hunger Makers*, p. 34.

⁶¹ BBC World Service, *The Documentary: Bubble Trouble*, Episode 3, minute 0:15:43.

⁶² Schumann, 2011, *Hunger Makers*, p. 32.

huge potential power over pricing.⁶³ In 2000 the Commodity Modernization Act, the same legislative act which granted a quasi-abolition of position limits, explicitly provides for the exemption of OTC trade from any supervision.⁶⁴

Higher demand for agricultural commodities, caused by an ever increasing population and the scarcity of land usable for cultivation, is seen as one of the mega-trends of the 21st century.⁶⁵ As no market saturation is in sight, agricultural commodities are deemed to be an extraordinarily lucrative investment.⁶⁶ At the world's most important trading platform, the Chicago Board of Trade, these profit aspirations become manifest in the increased number of index funds. The same is valid for other trading platforms, such as the trading platform in Geneva, which is the most significant one in Europe. According to Barclay's Capital the amount of money invested in commodity derivatives rose from 13 billion in 2002 to 412 billion US dollars in 2011.⁶⁷ However, these figures do not contain the amounts which are additionally used by hedge funds for betting purposes at the commodity markets. These funds are virtually unregulated and have an investment volume of approximately 2 trillion US dollars.⁶⁸ The calculation conducted by Barclay's neither includes the OTC-trade, which the Bank for International Settlements estimates to have reached 461 billion US dollars in December 2010.⁶⁹ Based on the calculations and estimations Schumann, in his study for Foodwatch, explains that it can be safely assumed that more than 600 billion US dollars are invested in the financial industry's commodities business.⁷⁰

Considering these numbers the profiteers can be easily identified. Goldman Sachs alone achieves a net income of nearly 5 billion US dollars per annum with their commodities business, equalling roughly 10% of the company's overall income.⁷¹ Similar results can be observed at other banks such as JP Morgan and Deutsche Bank, the latter referring to

⁶³ Schumann, 2011, Hunger Makers, p. 35.

⁶⁴ Schumann, 2011, Hunger Makers, p. 33.

⁶⁵ Deutscher Bundestag, 2011, expert statement by Rafael Schneider, p. 1.

⁶⁶ Ibidem.

⁶⁷ Barclays Capital, Commodities Research, April 2011.

⁶⁸ Schumann, 2011, Hunger Makers, p. 27.

⁶⁹ Bank for International Settlements, 2011, OTC derivatives market activity.

⁷⁰ Schumann, 2011, Hunger Makers, p. 36.

⁷¹ Goldman Sachs, 2009 Annual Report.

commodity trading as "the most important area of growth".⁷² Another actor benefitting from the increased trade in commodity derivatives are the exchanges themselves. Every transaction leads to fees being paid. For instance, the CME Group, owner of the futures exchanges in Chicago (CBOT) and New York (NYMEX), made an annual net profit of 3 billion Euro, half of which is attributable to trade in commodity derivatives.⁷³

INTERIM FINDINGS

The historical perspective on speculation helps to recognise the important role of speculation for the functioning of markets. Looking at the developments in the past centuries and decades, hedging against risks has to be recognised as a legitimate concern, and as requiring the availability of future buyers or sellers in sufficient numbers. Therefore, a certain amount of speculators is essential for the proper functioning of commodity futures markets. Nevertheless the danger of manipulation and excessive speculative activities in unregulated markets has become evident. The reaction of the Roosevelt administration to these threats illustrates that policy makers do possess the means to intervene in order to prevent or mitigate adverse human rights impacts. The successful lobbying of the financial industry led to deregulation and the removal of the introduced safeguards can be considered as an erosion of state power that might be incompatible with international human rights law obligations. As demonstrated, speculation on the price of agricultural commodities remains a highly profitable business. But who is ultimately paying the price for these profits? Is it the most vulnerable part of the world population that already spends the largest part of their income to feed themselves and their families? The answer to this question leads to the preliminary controversy as to whether speculation on agricultural commodity markets is responsible for high and volatile food prices. This "bitterly fought academic and political dispute" is the subject of the next chapter.⁷⁴

⁷² Cui, Fitzpatrick, Big Banks Cash In on Commodities, Wall Street Journal, 2 June 2011.

⁷³ Schumann, 2011, Hunger Makers, p. 37.

⁷⁴ Ibidem.

2. THE RELATIONSHIP BETWEEN SPECULATION AND PRICE VOLATILITY

a) WHAT IS PRICE VOLATILITY

First, it is essential to define price volatility. It can broadly be described as the movement of a price up or down over a given time period.⁷⁵ The FAO High Level Panel of Experts on Food Security (hereinafter HLPE) considers price variations an essential component of the normal functioning of markets. For economists “the essence of the price system is that when a commodity becomes scarce its price rises, thus inducing a fall in consumption and signalling more investment in the production of that commodity”.⁷⁶ Unlike manufactured goods, agricultural production is inevitably marked by a certain extent of unpredictability.⁷⁷ Therefore price volatility is not *per se* alarming, as long as it does not reach a level which is not traceable to market fundamentals.

While "normal volatility" is deemed to be essential for the proper functioning of markets, there is wide agreement that "excessive volatility", causing sudden or unreasonable fluctuations or unwarranted changes in the price of a contract commodity⁷⁸, needs to be prevented. Prashak argues that “[...] the efficiency of the price system begins to break down when price movements become increasingly uncertain and precipitous, and ultimately reaches the point of redundancy when prices undergo extreme volatility [...]”. In his opinion the exact magnitude of a crisis is hard to quantify and therefore he suggests to concentrate on “[...] the shock's likelihood to overwhelm a country's ability to dampen the shock or to mitigate its impact.” The advantage of such an attempt to measure the excessiveness is taking into account the indicator of vulnerability. The impact on individuals and countries can be very insightful. Yet, the relation between price variations and the so-called “market fundamentals” also needs to be carefully evaluated. For this reason some economists refer to excessive prices as

⁷⁵ Daviron et al., 2011, p. 5.

⁷⁶ Prakash, 2011, p. 1.

⁷⁷ Kerckhoffs, van Os, Vander Stichele, 2010, p. 2

⁷⁸ United States of America Commodity Exchange Act, chapter 1, paragraph 6a excessive speculation.

those lacking a relationship with a change in supply or demand.⁷⁹

b) THE CONTROVERSIAL RELATIONSHIP BETWEEN EXCESSIVE SPECULATION AND PRICE VOLATILITY

Can there be a definite scientific proof that excessive speculation causes price volatility? From a legal perspective it seems necessary to demand a causal link between the two phenomena as a precondition to subsequently turn to the question of human rights implications. I will argue that despite the difficulties to establish a cause and effect relationship, there is solid evidence in favour of such a link, which cannot be ignored. Unarguably, food price volatility is caused by manifold factors. This chapter shows that speculation rides on the back of these factors amplifying and worsening its effects.

The arguments for and against a decisive role of speculation in extreme price swings revolve around the ideological controversy over the efficiency of markets.⁸⁰ First, the counter arguments will be presented and refuted. Then the argumentation in favour of a link between speculation and price volatility will be explained. Despite the persuasiveness of these arguments an alternative solution to this controversy will be developed: the precautionary principle.

aa) THE ARGUMENTS

(1) CONTRA

Attempts to prove the influence of speculation in destabilising prices are often discredited. Steve Strongin of Goldman Sachs, for instance, reacted to a Harper's magazine cover story by calling it a misrepresentation of "some of the most basic aspects of the commodity futures markets" and accused the author of spinning "a tale

⁷⁹ Daviron et al., 2011, p. 6.

⁸⁰ Interview Flassbeck, 1 May 2012.

that had scant regard for reality" and spreading "unfounded conspiracy theories".⁸¹ It is argued that speculation "provides the futures markets with a stable pool of capital that improves the ability of farmers to insure themselves against the risks inherent in agricultural prices, which can allow them to produce more food at a lower cost."⁸² A recent example of a common reaction of an actor accused of engaging in excessive speculation is German multinational services company Allianz. In 2011, the company's total funds invested in commodities reached 18.44 billion Euro, with an estimated 6.24 billion Euro directly or indirectly invested in agricultural commodities.⁸³ The company's spokesperson stated that high food prices are primarily caused by long-term trends like population growth, climate change, political crises, or an increasing demand for biofuels and not by derivative trading.⁸⁴ In fact, this statement reflects one of the standard arguments to invalidate attempts to prove the negative sides of speculation. The same reasons that make speculation so attractive for the financial industry are employed to demonstrate the harmlessness of speculation. Population growth, emerging economies and an increased demand for commodities equal an increase in prices and in profit prospects. This commodity "super cycle"⁸⁵ is believed to continue irrespective of the ups and downs of the global economy. High prices are thought to be exclusively driven by the **fundamental factors of supply and demand**, whereas speculators are simply transmitting the bad news.⁸⁶ While it has to be acknowledged that manifold factors on both the supply and demand side contribute to hunger and malnutrition, the existence of speculation cannot be ignored and its effects on price fluctuation needs to be analyzed. The reason why the assertion that there is no proof of any negative effects of speculation has been so successful in the past is closely related to the opacity on modern commodity derivative markets.⁸⁷

Another argument often employed is that speculation is not only harmless, but even

⁸¹ Strongin, Steve, 2010, Letter to the Editor.

⁸² Strongin, Steve, 2010, Letter to the Editor.

⁸³ Oxfam Germany, 2011, p. 9.

⁸⁴ Bauchmüller, Hagelüken, Spekulation mit Lebensmitteln, Sueddeutsche Zeitung, 9 May 2012.

⁸⁵ Jones, Roger, Commodity super-cycle is back in full swing, Financial Times, 1 February 2011.

⁸⁶ Schumann, 2011, Hungermakers, p. 39.

⁸⁷ Schumann, Spekulanten sind die Hungermacher, Der Tagesspiegel, October 23 2011.

indispensable. It is argued that speculators provide the markets with the needed liquidity and only through their presence commodity futures markets could fulfil their function to hedge and predict prices. Such lines of reasoning might be convincing for markets made up predominantly of buyers and sellers that have an interest in the underlying physical good. In markets in which the majority of the market participants are purely financially motivated speculators, completely disconnected from the actual commodity concerned, the argument becomes invalid. The consequences of deregulation are visible at the Chicago Board of Trade. The data for wheat contracts indicates a large increase of contracts held by speculators who are not interested in the traditional form of speculation in order to safeguard prices. In 2008 the share of hedgers had decreased to about 35% while speculators made up 65%.⁸⁸ Even if there was a need for liquidity, the index funds and their investors would be unable to provide it. The reason for this is that, contrary to traditional speculators, index investors act exclusively as buyers on future commodity markets. Through this domination of *long positions* in futures contracts "the market continuously experiences new demand which can never be physically satisfied, because goods are not supplied for money."⁸⁹ Obviously this does not provide liquidity to the market. Instead this strategy withdraws liquidity from the market.⁹⁰ This view is shared by hedge fund manager George Soros who criticised the "[...] piling in on one side of the market" and warns about index funds' "sufficient weight to unbalance it."⁹¹ Advocates of speculation also emphasise the importance for producers and processors of being able to hedge against price risks. In reality, the increased volatility of prices on futures markets generates higher costs for hedging, while uncertainties are even higher.⁹²

Nobel prize winning economist Paul Krugman does not believe in any harmful consequences of speculation on agricultural commodity markets. In his column for the New York Times in June 2008 he writes that a bet about the future price has "no, zero,

⁸⁸ Better Markets, 2011, p. 4.

⁸⁹ Bass, 2011, p. 45.

⁹⁰ Bass, 2011, p. 45.

⁹¹ Chung, Soros sounds alarm on oil bubble, Financial Times, 3 June 2008.

⁹² Schumann, 2011, Hunger Makers, p. 44.

nada direct effect on the spot price."⁹³ He argues that, no matter how much money is invested into futures contracts, spot market prices are not affected. In his opinion the spot price is exclusively determined by the available quantities and the corresponding demand for the commodity concerned. Thus, he considers speculation to be a "zero-sum game"⁹⁴ with no consequences for consumers and developing countries. There could only be an indirect effect, if high futures prices led to producers hoarding their physical goods to achieve higher prices. Hoarding, for Krugman, is only a theoretical possibility, since "there isn't any evidence from the inventory data that this is happening."⁹⁵ However, the assertion of spot markets being completely independent from futures markets is already not plausible. Firstly, only futures markets offer a substantial overview on the general market situation. This is due to the fact that, for the physically traded goods, only regional exchange platforms exist which issue irregular price quotations. Therefore, buyers and sellers alike refer to futures markets to know their prices.⁹⁶ Secondly, the microeconomic considerations of producers need to be taken into account. Would any producer sell his goods at a lower price than he could achieve at futures markets? This question was also raised by the International Food Policy Research Institute, which concluded that the futures markets analyzed generally dominate the spot markets.⁹⁷ This means that, although the physically available quantities remain unchanged, prices may fluctuate. This is especially true for the case of commodity indices, where investors hold *long positions* over a prolonged period of time, which Olivier De Schutter has called a form a virtual hoarding.⁹⁸ In this context UNCTAD remarked that spot prices may rise due to everybody's expectation of higher prices, triggered by increasing futures prices following higher demand for futures by financial speculators.⁹⁹ Thirdly, Krugman's storage hypothesis overlooks that no reliable data is available on grain stocks. Companies such as Cargill, ADAM, Bunge, Dreyfus and Glencore do not provide information about storage. Thus, it might very well be that

⁹³ Krugman, Speculative nonsense, once again, New York Times, June 23 2008.

⁹⁴ Schumann, Hunger Makers, p. 46.

⁹⁵ Krugman, Speculative nonsense, once again, New York Times, June 23 2008.

⁹⁶ Schumann, Hunger Makers, p. 47.

⁹⁷ Hernandez, Torrero, Maximo, 2010, p. 18.

⁹⁸ Interview De Schutter, 17 April 2012.

⁹⁹ UNCTAD, 2009(a), Chapter III, p. 26.

these actors, instigated by high futures prices, resort to hoarding. It cannot be denied that it would be a lucrative business to buy certain quantities of grain to resell them later in fulfilment of relatively high-priced futures contract.¹⁰⁰

(2) PRO

For economist Tassos Haniotis of the Directorate General for Agriculture of the European Commission the debate resembles the old dispute on the harmfulness of smoking: "evidence is growing, but the industry concerned will deny it for as long as it can."¹⁰¹

Various NGOs as well as IGOs accuse banks, insurance companies and other actors of aggravating the effects of hunger through their speculative activities. For instance, Oxfam warns about rising food prices as a consequence of excessive speculation and presents their campaign as a matter of life or death to many in the developing world.¹⁰² The relationship between futures trading and hunger is considered to be evident. In Oxfam Germany's most recent publication called "Don't gamble with food – how the German financial industry is making a business out of hunger" emphasis is put on the increased derivatives trade based on agricultural commodities which rose from nine billion in 2003 to 99 billion US dollars in 2011.¹⁰³ The report stresses the already difficult preconditions related to food production in developing and least developed countries and mentions climate change, the expropriation and expulsion of small farmers from their lands and the growing production of biofuels on lands previously used for the cultivation of food. Due to these trends, markets are already at risk of instability and prices are more likely to be volatile. "This is exactly what food speculators bet on" explains the report and concludes that speculation accelerates existing trends and artificially inflates prices.¹⁰⁴

¹⁰⁰ Schumann, 2011, *Hunger Makers*, p. 49.

¹⁰¹ Tassos Haniotis, cited in: Schumann, 2011, *The Hunger-Makers*, p. 54.

¹⁰² Oxfam Germany, 2012, Video.

¹⁰³ Barclay's Capital, *Commodity Refiner*, Autumn 2011, p. 47.

¹⁰⁴ Hachfeld; Pohl; Wiggerthale, 2012, p. 11.

In 2010 eighteen economists sent a letter to United States Congress arguing "deregulation that began in 2000 [...] encouraged hyper-speculative activities by market players who had no interest in the underlying physical commodities being traded." According to them "this produced severe price swings for both oil and food in 2008-09 that destabilised business and household budgets in the US and throughout the world."¹⁰⁵ Similarly the UN Commission of Experts on Reforms of the International and Monetary System concluded that commodities such as food had become financial asset classes subject to financial investment and speculation, thereby contributing to the spread of inflation during the preliminary stages of the crisis.¹⁰⁶ The United Nations Conference on Trade and Development (UNCTAD) already concluded in 2009 that "financial investors have accelerated and amplified price movements driven by fundamental supply and demand factors, at least in some periods of time".¹⁰⁷ The UNCTAD report "Price Formation in Financialized Commodity Markets" argues that the factors described above are not sufficient to explain recent commodity price developments. Instead the missing element is considered to be the financialisation of commodity markets.¹⁰⁸ Even parts of the financial industry, such as Merrill Lynch came to similar conclusions.¹⁰⁹

An area where the role of speculation seems to be less disputed is crude **oil markets**. Media attention is frequently devoted to wars and revolutions and the increased demand in China. Yet, it has become obvious that even if these factors are absent or of minor significance, strong volatility of oil prices can still be observed. Two examples illustrate the dimension of price spikes. From January 2008 to June 2008 the price per barrel increased by 50%. Remarkably, the pre-conditions were not favourable for such a surge in prices. To the contrary, previously oil production had even slightly increased.¹¹⁰ In response to these events, even the European Central Bank observed that within the time

¹⁰⁵ Ash, M. et al., 2010, Letter to the Reconciliation Committee.

¹⁰⁶ Stiglitz, J.E et al., 2009, page 59.

¹⁰⁷ UNCTAD, 2009(b), Chapter II: The financialization of commodity markets.

¹⁰⁸ UNCTAD, 2011, Executive summary.

¹⁰⁹ Thornton, Henry, Carter, Inside Wall Street's Culture of Risk', Bloomberg Business Week Magazine, 11 June 2006.

¹¹⁰ Schumann, 2011, Hunger Makers, p. 55.

period from 2000-2008 prices were 15 percent higher than the level one would have expected on the basis of fundamental market data.¹¹¹ The second seemingly inexplicable rise in oil prices could be witnessed in the first quarter of 2011. Despite the interruption of oil production in Libya there was no supply shortage. Nevertheless, the price of Brent Crude Oil per barrel increased by more than 30 percent.¹¹² The consequences of high oil prices also have implications for grain cultivation, which is a very energy-intensive process. World Bank economist John Baffes has calculated that there is a significant transmission from oil to grain prices, which by itself can lead to hunger and malnutrition.¹¹³

Is there any logical reason why these observations should be inapplicable for agricultural commodities? While the oil market surely has its specificities, financial interests and the logics of profit-maximisation have the same degree of relevance on both markets. At the very least this underlines the interconnectedness across different commodity sectors and shows that parallels can be drawn.

One of the strongest arguments to establish a causal link between speculation and volatile prices is the **insufficiency of fundamental market data** to explain the extent of price swings. FAO and OECD future outlook predicts that prices will continue to rise in the medium-term, but prices will not go as high up until 2019 as they did in 2007 and 2008.¹¹⁴ This prediction begs the questions why prices rose so high in 2007/08.¹¹⁵ The UN Special Rapporteur on the right to food, Olivier de Schutter, insists that “a significant portion of the increases in price and volatility of essential food commodities during the food crisis of 2007/2008 can only be explained by the emergence of a speculative bubble.” He argues that prices for a number of commodities fluctuated too wildly within such limited time-frames to be the result of changes in supply and demand. From that he deduces that “a significant contributory cause of the price spike

¹¹¹ Lombardi, Van Robays, Ine, 2011, p. 6.

¹¹² Blas, Exxon chief on supply, demand and \$120 crude, Financial Times, 20 April 2011.

¹¹³ Baffes, Haniotis, 2010, p. 16.

¹¹⁴ OECD - FAO, 2010, Agricultural Outlook 2010-19, Summary.

¹¹⁵ Jones, Tim, 2010, p. 22.

[has been] speculation by institutional investors who did not have any expertise or interest in agricultural commodities [...]."¹¹⁶ Furthermore De Schutter observes that supply and demand factors may spark food price crises but adds, that its effects are exacerbated by excessive and insufficiently regulated speculation. He recognises the effects of the promotion of biofuels and other supply shocks, but refers to them as minor catalysts and insists that these factors "[...] were blown out of all proportion by large institutional investors [...]."¹¹⁷ UNCTAD agrees with De Schutter's analysis and finds that, evaluating price developments, particularly in the last decade, one has to recognise, that these fundamental factors alone fail to explain the extend of price swings.¹¹⁸ The price of rice within the period from April 2007 and April 2008, which was marked by an enormous increase of 165 percent, serves as a convincing example to confirm this hypothesis. The existing rice stocks were not particularly low and production also remained high during these twelve months. Also rice cannot be used to produce biofuels.¹¹⁹ Additionally, the FAO has noted some speculative behaviour rather than markets fundamentals playing a role in the escalation of world food prices and the prevailing high price volatility.¹²⁰

When peaks in food prices persist for a considerable amount of time, poor harvests or increasing demand are potential explanations. Neither of these factors can explain why the price of wheat and corn increased by 140 percent between June 2007 and June 2008.¹²¹ For financial analysts the problem was a chronic supply shortage. Is increased meat consumption in countries like China and India really capable of explaining, at least partly, this price explosion? The FAO assessment concerning this question is clear: The new demand is being met by domestic sources and therefore "[...] the high commodity prices of 2007 and 2008 do not seem to have originated in these emerging markets."¹²² Did biofuels then play the decisive role in explaining the excessively high prices? While

¹¹⁶ De Schutter, 2010(a), p.8.

¹¹⁷ De Schutter, 2010(a), p. 3.

¹¹⁸ Interview Flassbeck, 1 May 2012.

¹¹⁹ Wahl, 2008, p. 6.

¹²⁰ FAO, September 2010, Final Report of the Committee on Commodity Problems, p. 1.

¹²¹ Schumann, 2011, Hunger Makers, p. 59.

¹²² FAO, 2009(a), The State of Agricultural Commodity Markets, p. 19.

it is true that ethanol production, particularly in the United States, expanded massively, World Bank statistics indicate that demand for biofuels might have had an impact on the food crisis, but to a much lesser extent than initially thought. While ethanol production reached new records throughout 2008, prices collapsed in the second half of 2008, falling even below the level of 2006.¹²³

The ratio between notified stock piles and consumption, the so called *stocks-to-use ratio*, is the main indicator for such a shortage. While it is true that this ratio, due to severe crop failure and bad harvests in Australia, sank to an unprecedented low around the turn of the year 2007/08, it cannot constitute an explanation of the price fluctuations discussed. When observed over a long term interval, grain prices and *stocks-to-use ratio* completely diverged. In 2006/07 the ratio for corn was already on a similarly low level. However, this has not resulted in a sharp increase in prices. Although stocks were much better equipped in summer 2011 than in 2008, the grain price index still skyrocketed to the highest level so far, while consumption had barely increased.¹²⁴ Probably the most complete and comprehensive investigation on the disconnectedness from market fundamentals was published by a group of economists at the New England Complex Systems Institute in Boston. According to their study, the price surges for the crop years 2007/08 and 2010/11 can be traced back to speculation. The authors have calculated that prices were fifty percent higher than the level which the ratio between supply and demand had indicated on the physical market.¹²⁵ This discrepancy counters the argument of efficient markets. On a spot market prices are negotiated on a commodity for immediate delivery.¹²⁶ When a future contract terminates both prices should theoretically gradually converge. The divergence between the two demonstrates that the price discovery and price risk management are not being achieved properly. Therefore speculation does not fulfil its originally intended role to hedge the risk of market participants, instead it serves as an "[...] inherently 'wrong' signalling device [...] very

¹²³ Baffes, Haniotis, 2010, p. 18.

¹²⁴ Schumann, 2011, Hunger Makers, p. 60.

¹²⁵ Lagi et al., 2011, p. 6.

¹²⁶ Schumann, 2011, Hunger Makers, p. 46.

effective in determining and manipulating market behaviour."¹²⁷ For this reason the speculators' claim that they anticipate supply and demand changes, acting as mere messengers, is invalid. Prices no longer provide a reliable signal to producers or consumers.¹²⁸

These findings cast doubt on the dogma of the **self-regulating efficiency of markets**. The insufficiency of the factors discussed, implies that there must be another factor causing price volatility. There is increasing evidence to support the view that speculation contributes to otherwise inexplicable price fluctuations. The fact that the strong and sustained increase in primary commodity prices between 2002 and mid-2008 was accompanied by the growing presence of financial investors on commodity futures exchanges (see previous chapter) can already be seen as an indication that prices were "[...] largely driven by financial investors' use of commodities as an asset class."¹²⁹

The influx of non-traditional investors into food commodities derivatives markets took place, because other markets had dried up. Since the dot com bubble had burst at the end of 2001, the stock market, bonds, the housing market and related complex financial instruments have become less attractive¹³⁰ and new "refuge values" were needed.¹³¹ In the second half of 2008 speculators withdrew large volumes from the financial commodity markets and in parallel food prices decreased. Yet, this hint by itself is not sufficient and needs to be complemented by other arguments. Interestingly, there are various correlation models that demonstrate the decisive role of speculation in price formation.

The prices for food commodities, being traded at futures markets, move in step with the prices for shares, currencies and oil. Such a **high degree of correlation** is only possible for financial assets. From correlation models it can therefore be concluded that high

¹²⁷ Gosh, Javati, 2010, p. 7.

¹²⁸ Wooley, Paul, 2010, p. 139.

¹²⁹ UNCTAD 2009(b), Chapter II, p. 53.

¹³⁰ Kerckhoffs, van Os, Vander Stichele, 2010, p. 7.

¹³¹ De Schutter, 2010(a), p. 6.

food commodity prices were a direct consequence of speculative investors.¹³² However, the reference to correlations poses a standard problem in statistical analysis. "If two variables develop similarly over time, this does not say whether one causes the movement of the other, or whether this happens because of a common cause, or if the values are correlated purely by coincidence."¹³³ Therefore additional efforts are necessary to prove a cause and effect relationship. A commonly accepted method to establish causality in the fields of economics is the *Granger Test*. In very simple terms, as Schumann explains, "the values of two variables are compared to each other, not at the same point in time in which they are measured, but deferred by a certain period of time – for days, weeks or months depending on the object of research."¹³⁴ If this comparison allows predicting the movement of one variable based on the movement of the other, causality between the two has been established. Several studies exist that are in line with this requirement. For instance, Prof. Kenneth Singleton of Stanford University, applying the *Granger Test*, found that "growth in positions of index investors [...] had significant positive effects on returns in oil futures markets around the time [of the] 2008 boom/bust in oil prices."¹³⁵ Thus, he observes that the trading activities of index investors, hedge funds and other actors in commodity markets, set prices in commodity spot and futures markets.¹³⁶ Christopher Gilbert of Trento University, also basing his findings on the *Granger Test*, argues that index-based investors may have generalised price increases across markets and increased price correlations across markets, both within the agricultural sector and between agriculture and other sectors.¹³⁷

Correlations can be very useful in complementing these findings. The at first glance illogical price movements demonstrate the **financialisation of commodity trading**. As a result, interest rates changes, banking crises and the general herd mentality of asset managers became the central factors determining price developments. This striking link

¹³² Interview Flassbeck, 1 May 2012.

¹³³ Schumann, 2011, *Hunger Makers*, p. 51.

¹³⁴ *Ibidem*.

¹³⁵ Singleton, 2011, p. 27.

¹³⁶ *Ibidem*. p. 28.

¹³⁷ Gilbert, 2008, p. 29.

is best highlighted by the consonance between the monetary policy of the US Federal Reserve and the development of commodity prices. The latter resumed its rise following the financial crisis precisely when the Federal Reserve began buying government bonds in the amount of 300 billion dollars in May 2009. When the US central bankers used the same measure again in August 2010 pumping another 600 billion dollars into the market until June 2011, a new price explosion on commodity markets followed.¹³⁸

Princeton economist Ke Tang also noted that futures prices of different commodities in the US became increasingly correlated with prices of financial assets and with each other. In his research he finds that prices of non-energy commodities are determined "[...] by a whole set of financial factors such as the aggregate risk appetite for financial assets, and investment behaviour of diversified commodity index investors." More specifically he refers to the synchronised price boom of oil and non-energy commodities in 2006-2008.¹³⁹

Yet another evidence for the financialisation of food commodity markets is the correlation between the prices for gold, a classical refuge value, and food prices. The EU Commission observed that both started to increase gradually since 2005 and accelerated sharply in parallel with the subprime crisis in August 2007.¹⁴⁰

Furthermore, it cannot be ignored that **herding and mimicking** patterns are prevalent on the commodity derivatives markets. Schumann describes this phenomenon as "a self-fulfilling and reinforcing prognosis".¹⁴¹ The Austrian Economist Stephan Schulmeister has shown in an in-depth analysis that this herding pattern due to widespread use of automated trading programs amplifies the trending behaviour of commodity prices.¹⁴² This helps to understand the close correlation between food prices and contracts purchased by index funds. A comparison between UNCTAD data on index trader positions and the IMF Food Price Index provides substantive evidence that net long

¹³⁸ Schumann, 2011, *Hunger Makers*, p. 61.

¹³⁹ Tang; Xiong, 2010, p. 30.

¹⁴⁰ European Commission, Staff Working Document, Task force on the role of speculation, 2008, p. 7.

¹⁴¹ Schumann, 2011, *Hunger Makers*, p. 42.

¹⁴² Schulmeister, 2009, p. 70.

positions of index traders rise and fall in line with food prices.¹⁴³

Correlation between commodity index prices and exchange rates for currencies is also high, which indicates that speculators are investing money into and withdrawing it from currencies as a reaction to the same news about the general state of world markets.¹⁴⁴ As UNCTAD has pointed out "[...] there are phases of speculative activity where currencies [...] and commodity prices are clearly driven by factors beyond fundamentals because the fundamentals underlying the different prices cannot go into the same direction."¹⁴⁵

Based on the presented evidence a study of Bremen University of Applied Sciences, commissioned by the non-governmental organisation *Welthungerhilfe*, estimates that the speculation on grain markets during the period from 2007 to 2009 has led to a price upsurge of up to 15 percent.¹⁴⁶

bb) INTERIM RESULTS

There are convincing arguments that speculation is *conditio sine qua non* for extreme price volatility over an extended period of time. Above all, the evidence analyzed shows that speculation aggravates and increases price swings. Clearly the level of futures prices and their underlying commodities are not of any concern to non-traditional speculators, as long as they can make a profit. Commodity markets are susceptible to "[...] information asymmetries and associated tendencies to be led by a small number of large players."¹⁴⁷ Far from being 'efficient markets' in the sense hoped for by mainstream theory, they allowed for inherently 'wrong' signalling devices to become very effective in determining and manipulating market behaviour. This financialisation process across commodity markets has led to an increasing disconnectedness from the fundamentals of the physical commodities. It cannot be overlooked that the influx of billions of dollars into commodities for the purpose of speculation has abrogated, at

¹⁴³ Jones, Tim, 2010, p. 11.

¹⁴⁴ Jones, Tim, 2010, p. 12.

¹⁴⁵ UNCTAD, 2009(a), Chapter III, Geneva, p. 27.

¹⁴⁶ Bass, 2011, p. 7.

¹⁴⁷ Gosh, 2010, p. 7.

least partly, the role of supply and demand in price formation. At the very least, one has to recognise that speculative investors have amplified fundamentally-driven price movements.

Unfortunately this view is still not shared by everyone. Despite the strong arguments presented in the previous sections, the financial industry as well as numerous scholars and politicians refuse to acknowledge any relationship between speculation and volatile prices. The negligence to recognise the harmful role of speculation must be taken very seriously, as it inhibits the attempts to oblige states to take regulatory action. For this reason it seems crucial to find a solution to this problem. How can human rights obligations be constructed if there is no consensus that excessive speculation at least amplifies and aggravates the effects of other factors causing price volatility? Shouldn't those that maximise their profits by investing in agricultural commodities and potentially endanger the lives of millions of people carry the burden to prove that their activities cause no harm?

In order to overcome this obstacle it seems feasible to apply the internationally recognised precautionary principle. The next subchapter will therefore outline why there are good reasons for an analogous application of this principle for the problem of speculation on agricultural commodity markets.

c. OVERCOMING THE CONTROVERSY: THE PRECAUTIONARY PRINCIPLE

The following remarks outline that the problem of supposedly inconclusive evidence can be solved in analogical application of the precautionary principle. As a result, the ultimate and definite proof would be dispensable, as long as there is a serious and substantial threat of adverse human rights impacts. From a procedural point of view the precautionary principle reverses the burden of proof, so that the potential perpetrator is under an obligation to prove that his actions do not pose a risk to the environment. In order to comprehend the advantages of this instrument it is worthwhile to review its implementation at the national, European and international level.

aa) INTERNATIONAL LAW

International law contains several explicit references to the precautionary principle. For instance, article 3 paragraph 3 of the United Nations Framework Convention on Climate Change (UNFCCC) postulates that "The Parties should take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures."¹⁴⁸ Similarly article 6 of the United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea, signed on 10 December 1982, relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, calls for the application of the precautionary approach and outlines that "the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures."¹⁴⁹ Yet another, although not legally binding, example is contained in principle 15 of the 1992 Rio Declaration on Environment and International Development. It states that the precautionary approach shall be applied in case of threats of serious or irreversible damage.¹⁵⁰ The mentioned codifications help to identify the contours of the normative content of the precautionary approach. Scientific uncertainties cannot serve as a justification for the omission of measures to protect the environment. There can be a demand for action even if definite scientific proof is lacking.¹⁵¹ Meanwhile the precautionary principle is considered by many to be part of customary international law.¹⁵² The status of the precautionary principle as a rule of customary international law is relevant, since a rule of customary law creates obligations for all states regardless of being parties of a certain treaty, except those which have persistently objected to the practice and its legal consequences.¹⁵³

¹⁴⁸ United Nations General Assembly (UN GA), UNFCCC, 1994. Doc. A/RES/48/189.

¹⁴⁹ UN GA, Agreement for the Implementation, 1995, UN Doc. A/CONF.164/37.

¹⁵⁰ UN GA, Rio Declaration, 1992, UN Doc. A/CONF.151/26.

¹⁵¹ Erben, 2005, S. 273.

¹⁵² O'Riordan, Cameron, Jordan, 2001; Freestone/Hey, 1996, S.3.

¹⁵³ Sirinskiene, 2009, p. 354.

If one considers the great variety of treaties and declarations incorporating the precautionary principle it becomes clear that it is at least "crystallising into a rule of customary environmental law."¹⁵⁴ The domestic law of numerous countries, the decisions of national and international courts, where legal parties defend their legal interests based on the precautionary principle, also point into this direction. Classical examples of such application of this principle are the *Gabčíkovo-Nagymaros Project* and *French Underground Nuclear Tests* cases of the International Court of Justice (ICJ). In the latter case, Judge Weeramantry in his dissenting opinion even qualified the precautionary principle as part of the *sine qua non* for human survival."¹⁵⁵

bb) EUROPEAN UNION LAW

Within the European Union framework the precautionary principle serves as the guiding principle of environmental law.¹⁵⁶ Furthermore, it is recognised in the legal systems of various EU member States. In Germany, the precautionary principle is enshrined as a state aim set out in Article 20a of the Basic Law for the Federal Republic of Germany which emphasises responsibility also for future generations.¹⁵⁷ In France the precautionary principle was inserted into the Constitution through the Environmental Charter in 2005.¹⁵⁸ At the EU level the precautionary principle is mentioned in the context of environmental protection in Article 191 paragraph 2 of the Treaty on the Functioning of the European Union. It stipulates that EU environmental policy shall be based on the precautionary principle and on the principle that preventive action should be taken.¹⁵⁹

According to a Communication from the Commission of the EU, the precautionary principle needs to be applied "where preliminary objective scientific evaluation

¹⁵⁴ Ibidem.

¹⁵⁵ ICJ, Nuclear Tests Case, 1974, Dissenting opinion of judge Weeramantry.

¹⁵⁶ Calliess, 2011, Art. 191 AEUV, Rn. 26.

¹⁵⁷ Ibidem.

¹⁵⁸ Loi constitutionnelle n° 2005-205 du 1er mars 2005 relative à la Charte de l'environnement, art. 5.

¹⁵⁹ European Union, Treaty on the Functioning of the European Union, Art. 191 (2).

indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection [...]."¹⁶⁰ Although in the Treaty reference is only made to environmental protection, the Commission stresses that in practice its scope is much wider and consequently other aspects such as human health are included in this mandate as well. The precautionary principle clearly aims at avoiding risks for protected legal interests and at reversing the burden of proof.¹⁶¹ It postulates that measures can be taken before there is a concrete threat to the protected legal interests. The duty to minimise risks invokes proactive and sustainable environmental policies targeted at the prevention of damage to the environment. Therefore the precautionary principle of article 191 (2) TFEU is to be applied, where scientific proof is inconclusive, but where a preliminary and scientifically objective risk analysis identifies an abstract concern.¹⁶²

The General Court (previously known as Court of First Instance) of the European Union has refined the dogmatic content by clarifying on the notion of risk. It reaffirmed the possibility to take preventive measures without having to wait until the reality and seriousness of the risks perceived become fully apparent. However, in the Court's view, the concept of risk requires a certain degree of likelihood that the negative effects which the measure is specifically designed to prevent will occur. This degree cannot be set at "zero risk". Thus, it is necessary to have a thorough risk assessment before any preventive action is taken. According to the Court this includes two components: a scientific analysis, and a political component ("risk management") in the context of which the policy maker must decide on the measure it considers appropriate given the degree of risk identified.¹⁶³

The precautionary principle in the EU is not restricted to environmental protection. In addition to the previously mentioned communication, other examples illustrating its

¹⁶⁰ Commission of the European Union, 2000, Communication from the Commission, summary, 3., p.3.

¹⁶¹ Calliess, 2011, Art. 191 AEUV, Rn. 28, 31.

¹⁶² Ziem, 2011, p. 5.

¹⁶³ European Union, Court of First Instance in cases Pfizer Animal Health SA v Council and Alparma Inc. v Council.

scope can be found. In European secondary law REACH, the European Community Regulation on chemicals and their safe use, is based on the precautionary principle and *inter alia* seeks to assure a high level of human health.¹⁶⁴ It also serves as an excellent example of how the burden of proof (in this case for the production and ingredients of chemicals) was shifted from public authorities to the (chemical) industry. The European Court of Justice (ECJ) has stressed that "where there is uncertainty as to the existence or extent of risks to human health, the institutions may take protective measures without having to wait until the reality and seriousness of those risks become fully apparent."¹⁶⁵ It thus awards the notion of precaution the status of a general principle of law.¹⁶⁶

What conclusions can be drawn for the problem of excessive speculation on agricultural commodity markets? As demonstrated in subchapter 2 b (aa) (2), there are at least well founded indications that speculation does have an impact on prices and that it plays a significant role in rising prices for basic food. As the next chapter will argue, rising prices for food commodities lead to hunger and malnutrition and pose an existential threat to a large number of human beings worldwide. In the light of the foregoing, it can be concluded that excessive speculation with agricultural commodities falls under the scope of the precautionary principle as recognised in European Union Law. If one were to accept the emergence of the precautionary principle as international customary law - due to its widespread and consistent application - the scope would be even wider.

d) INTERIM CONCLUSIONS

It follows from the previous considerations that excessive speculation amplifies and aggravates price volatility. Even if one considered the scientific evidence as inconclusive, the precautionary principle can be applied, reversing the burden of proof to the detriment of financial actors and providing a mandate to take action against excessive speculation. As a general trend in State responsibility it can be noted that

¹⁶⁴ European Union, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006.

¹⁶⁵ ECJ C-157/96 , 63.

¹⁶⁶ Arndt; Kahl, 2009, p. 131 f.

there has been a movement from strict *conditio sine qua non* theory over the foreseeability test to a less stringent causation test requiring only the “reasonable imputation” of damage.”^{167 168}

CHAPTER TWO: THE IMPLICATIONS OF EXCESSIVE SPECULATION FOR FOOD PRICES AND CONSUMERS

What are the implications of extreme price swings, especially of excessively high prices for agricultural commodities? The previous chapter has documented that futures prices at the commodity exchanges in the US and Europe guide the trading in physical goods on the international spot markets. Spot prices follow futures prices. Within the one-year period from January 2007 to the first half of 2008, maize prices increased by 74 percent, wheat by 124 percent and rice by 224 percent.¹⁶⁹ But to what extent are international prices transmitted to the local level? Such a transmission is a precondition for the attempt to construct human rights obligations corresponding to hunger and malnutrition in developing countries.

Therefore, this chapter will analyze the effects of international price volatility on local prices, poverty and on the macroeconomic stability of developing countries. An emphasis is put on excessively increasing prices hindering and preventing millions worldwide from having access to adequate food.

1. THE EXTENT OF TRANSMISSION BETWEEN INTERNATIONAL AND LOCAL FOOD PRICES

Are changes in the world market price of any given commodity reflected in changes in domestic prices? Theoretically, in conditions of free and efficient trade, prices should be quickly transmitted, only temporarily delayed by the duration of transportation.

¹⁶⁷ Olivier De Schutter et al., 2012, Commentary to the Maastricht Principles on Extraterritorial Obligations, p. 20.

¹⁶⁸ United Nations International Law Commission, 2006, Report on the work of its fifty-eighth session, p. 157.

¹⁶⁹ IMF, cited in: Keats; Wiggins; Compton; Vigneri, 2010, p. 1.

However, factors like "[...] border measures, domestic price policies, fluctuating exchange rates, transport costs, and market imperfections" can contribute to local prices not changing as anticipated by world market developments.¹⁷⁰

Naturally, international prices cannot be the only cause for local price fluctuation. Even when there is no volatility at the international level, prices at the local level can be subject to instability. Local agricultural markets can be extremely volatile regardless of the stability of international prices. This is particularly true for grain prices. Price volatility is determined by a wide range of **domestic as well as imported factors**. For imported products some degree of transmission seems obvious unless countermeasures to reduce the price are taken. But also locally grown products can be affected. In various poor countries, price volatility on domestic markets for locally grown products results from both the transmission of international price volatility and purely domestic sources.¹⁷¹ Thus, endogenous and exogenous factors need to be considered. However, for the purpose of this section, which attempts to outline the effects of speculation, only the effects resulting from international markets will be discussed.

While some countries are barely affected by price transmissions, others suffer immensely. These differences are partly related to the **wide variation** in the extent of transmission of global prices to local prices.¹⁷² The German economist Hans Bass has extensively dealt with the implications of international grain price increases for low-income countries. For his analysis he chose Haiti, Kenya, Mali and Nepal which are all characterised by a precarious food supply situation. He observed, however, a number of differences, leading to diverging mechanisms of price transmission.¹⁷³ In Bass' opinion local variables do play a role not to be underestimated in the price formation in developing countries. Yet, the significant raises in international price levels and the price bubbles of 2008 and 2011 have to be taken into consideration as well. He cites three reasons why a transmission to the local level in some cases is unavoidable. First,

¹⁷⁰ Keats; Wiggins; Compton; Vigneri; 2010, p. 1.

¹⁷¹ High Level Panel of Experts on Food Security and Nutrition (hereinafter HLPE), 2011, p.11.

¹⁷² Ivanic, Martin, Zaman, April 2011, p. 14.

¹⁷³ Bass, 2011, p. 57.

he explains, some countries cannot rely on price-stabilising imports, because due to the sharply increased world market prices the local demand is insufficient. Second, some countries react with export bans to the increased world market prices, which causes difficulties for their trading partners. Third, where despite increased world market prices, food is being imported, the price fluctuations from the world market are transmitted to the local markets, partly even independent from the actual local scarcity situation. At the same time Bass acknowledges that the transmission of international prices depends on many factors, which can mitigate, strengthen or even prevent it.¹⁷⁴

It could be argued that local and international food prices do not tend to be highly correlated. Indeed it is often claimed that international prices have a marginal effect on local price formation with local circumstances being a more decisive factor.¹⁷⁵ Especially prior to the food price crisis, studies insisted that international price variability explains a very small share of domestic price variability in developing countries.¹⁷⁶ Even if this should be the general rule, it is clear that exceptions, as illustrated by the **extreme price increase 2007/2008**, exist. The World Bank has calculated that these events raised average global food prices by 118 percent, while the food **price increase of 2010** raised food prices by 37 percent.¹⁷⁷ So how much of that was passed on to the local level?

The International Food Policy Research Institute (IFPRI) observed that the events in 2007/2008 caused a much stronger transmission between international and local prices than usual. Focusing on the impact on countries in Sub-Saharan Africa, an IFPRI analysis shows an increase in staple food prices by 63 percent on average, which was equivalent to about three-quarters of the proportional increase in world prices.¹⁷⁸ At the same time the organisation's research drew attention to the fact that a long term relationship between world and local prices exists only concerning 13 out of 62 African

¹⁷⁴ Bass, 2011, p. 83

¹⁷⁵ HLPE, 2011, p. 43.

¹⁷⁶ Byerlee, Myers, Jayne, 2005, p. 21 ff.

¹⁷⁷ Ivanic, Martin, Zaman, Hassan, 2011, p. 13

¹⁷⁸ Minot, 2011, p. 15.

food prices examined.¹⁷⁹ It also revealed that some staple foods are more closely linked to world prices than others. For instance the African rice price is highly correlated with the international level, while the maize price was transmitted to a much lesser extent.¹⁸⁰

UNICEF has analyzed the **period between May and November 2010** and has found that local prices increased in more than two-thirds of developing countries closely reflecting those in world food markets. The rate of increase was slower, but still substantial "[...] and appeared to be on a trajectory to surpass levels achieved during the zenith of the earlier global food crisis as early as December 2010."¹⁸¹ Furthermore, the organisation has pointed out that the food price levels have remained very high since the crisis in 2007/2008. This is alarming, particularly because poor households have exhausted coping strategies making them even more vulnerable to future price fluctuations.¹⁸²

The FAO HLPE on food security and nutrition has recently noted that it is domestic food price inflation and volatility that determine the poverty and food security impacts of international food crises. Simultaneously it recognised that the 2007/08 international food price surge was transmitted to domestic prices, while the following decline in international prices was only partially transmitted. For the international price rise that started in 2010 it also observed a transmission to domestic markets. The HLPE insists that transmission of international price spikes to domestic prices has been uneven and attributes this unequal distribution to differences "[...] across countries, commodities, and time periods [...]."¹⁸³ FAO senior economist David Dawe examined the experience in seven large Asian countries and concluded that at the end of 2007 on average the increase in domestic rice prices was about one-third of the increase in world market rice prices.¹⁸⁴

¹⁷⁹ Minot, 2011, p. 24.

¹⁸⁰ Minot, 2011, p. 25.

¹⁸¹ Ortiz, Chai, Cummins, 2011, p. 5.

¹⁸² Ortiz, Chai, Cummins, 2011, p. 1.

¹⁸³ HLPE, 2011, p.11.

¹⁸⁴ Dawe, 2008, p. 8.

Despite these findings it is important to underline that the extent of price transmission depends on what the concerned basic food stuff is, what country is concerned, and what the composition of the country is. Because of these specificities it is advisable to carry out individual analyses of price movements taking into account the aforementioned factors. However, some general remarks can be made. For instance, countries can be put into two broad categories: There are those that are in a position to be a stabiliser and employ suitable political measures to protect their domestic markets from rising international food prices. And there are others that could be labelled free trade countries in which international price swings are transmitted to local markets to a considerable extent.

Even if generally the extent of price transmissions is considered to be weak and uneven, a few countries with a statistically significant dimension of price transmission suffice to support the argument that speculation has impacts on the prices in developing countries. The next step is to demonstrate the adverse nature of these impacts.

2. THE CONSEQUENCES OF HIGH TRANSMISSION

A joint report, bundling the competences of FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF, explains that the underlying concern behind the debate on price volatility is food security.¹⁸⁵ In this connection it relies its findings on a World Bank study¹⁸⁶ which identifies consumers, especially poor consumers, as those most severely affected by high prices.¹⁸⁷

The extent to which malnutrition and poverty is caused or aggravated depends on manifold factors. Most relevant are the distribution of net sellers and net buyers of food staples, the specific commodities for which prices increase, the substitutability of overpriced food items, the coping strategies available to households, and policy

¹⁸⁵ FAO, 2011(b), Price Volatility in Food and Agricultural Markets, p.6.

¹⁸⁶ World Bank, Global Economic Prospects 2009, p. 95.

¹⁸⁷ Wodon et al., 2008(a).

responses by local, national and international authorities.¹⁸⁸ The FAO's most recent report on "The State of Food Insecurity in the World" underlines that the "impact of world price changes on household food security and nutrition is highly context-specific." It emphasises, inter alia, that the impact may differ depending on the respective commodity and the national policies adopted, as well as demographic factors and production characteristics of different households.¹⁸⁹ In general terms, high food prices can cause dramatic transfers of income within and amongst countries. Therefore, country-level impacts as well as household-level impacts of high food prices are analyzed in this section without neglecting the interrelatedness of both.

a) COUNTRY-LEVEL IMPACTS

In many developing countries there is an inability to buffer the effects of price increases, due to the dependency on food imports and the lack of national or regional stocks at reasonable prices.¹⁹⁰ According to the FAO, strong swings in commodity prices are capable of destabilising entire economies of commodity exporters and importers. Especially worrying is the destabilising effect on real exchange rates of countries, "[...] **hampering their efforts to reduce poverty**".¹⁹¹ Large increases in food prices **threaten macroeconomic stability and overall growth**, especially those of low-income, net-importing countries.¹⁹² Another macroeconomic consequence is that the balance of payments of food importers deteriorates. In addition, food price increases may trigger **inflation** and devaluation of the currencies concerned. Food price increases account for one third and in some cases even half of the nominal rate of inflation in many developing countries.¹⁹³ According to UNCTAD the price boom between 2002 and mid-2008 placed a heavy burden on many developing countries that rely on food and energy imports, and contributed to food crises in a number of countries in 2007-

¹⁸⁸ Ivanic, Martin, Zaman, April 2011, p. 3.

¹⁸⁹ FAO, United Nations World Food Programme, International Fund for Agricultural Development, 2011(a), p. 4.

¹⁹⁰ Schieck Valente, Suárez Franco, 2010, p. 447.

¹⁹¹ FAO, 2009(a), p.11.

¹⁹² FAO, 2008, High Level Conference on World Food Security, p. 17.

¹⁹³ Wahl, Peter, 2009, p. 5.

2008.¹⁹⁴ Another factor playing a role is the availability of domestic alternatives that can substitute internationally traded grains. Countries which do not possess such alternatives were confronted with the highest prices.¹⁹⁵ Additionally, it has been observed that in 2008 the transmission of high prices was exacerbated by the imposition of agricultural export restrictions in many developing countries seeking to insulate themselves from raising international grain prices.¹⁹⁶

World Bank studies of 2012 have revealed that East African economies, including Ethiopia, Kenya and Uganda, are most severely impacted by rising food prices. Alongside other factors, such as high fuel prices and poor harvests, they caused high inflation rates¹⁹⁷ inhibiting the process of economic growth.¹⁹⁸ Luckily the possibility of increased subsidies has mitigated the effects of high prices in some cases. As a response to the high food prices in 2011 some governments in the region have taken countercyclical fiscal measures. However, these policies have resulted in a reduction of financial buffers that would be valuable in the event of a significant downturn in the global economy.¹⁹⁹ Hence, the vulnerability of States to unforeseen economic events has increased.

b. HOUSEHOLD-LEVEL IMPACTS

The vulnerability of many people in the developing world arises from the fact that they spend very large fractions of their incomes on food. As a result, price volatility has a strong impact on food security because it affects household incomes and purchasing power.²⁰⁰ The U.S. Department of Agriculture has calculated that a 50 percent price rise in staple food prices leads to a mere six percent rise in retail food expenditure for consumers in high income country. The consequences for the population of a food

¹⁹⁴ UNCTAD, 2009(b), Chapter II: The financialization of commodity markets.

¹⁹⁵ World Bank, 2009, p. 96.

¹⁹⁶ Clapp, 2009), p. 309.

¹⁹⁷ In Ethiopia, inflation peaked at 40.1 percent in September 2011; in Kenya, it reached 19.7 percent in November 2011; and in Uganda, it hit 30.5 percent in October 2011.

¹⁹⁸ World Bank, Global Economic Prospects January 2012, Sub-Saharan Africa Annex. p. 6,

¹⁹⁹ Ibidem, p. 5.

²⁰⁰ HLPE, 2011, p. 9.

importing country of low income are quite different: a 50 percent increase in basic food prices amounts to a 21 percent increase in total food expenditure.²⁰¹

In an industrial country, between 10 and 20 percent of a household income are spent on food, whereas this proportion is dramatically higher in the Least Developed Countries (LDC's), amounting to a ratio from 60 percent up to 80 percent.^{202 203} This means that even relatively moderate price increases can have severe consequences, because people are unable to afford food at prevailing prices, even if it is physically available. On the basis of the 1996 food price level, it has been estimated that a 20 percent increase in food prices until 2025, would result in the number of malnourished people in the world increasing by 440 million.²⁰⁴

The vulnerability of the people living in Sub-Saharan Africa is particularly conspicuous. As an African Development Bank study illustrates, about 33 percent of the middle class (\$2-\$20 income per day) remain vulnerable to falling back into poverty in the event of sharp price increases, because the majority of these households have per capita incomes just above the \$2 poverty line (between \$2 and \$4 per day). Moreover, World Bank estimates predict that by 2015 between 38.0 and 43.8 percent of Sub-Saharan Africa's population will still be living below the \$1.25 poverty line.²⁰⁵

Subsequently the heterogeneous nature of impacts across households and individuals will be reviewed. It will be shown that the level of affectedness depends, among other things, on existing consumption patterns and the household's market position as net buyers or net sellers of food. A first distinction can be made between those living in **rural areas and others living in urban zones**. Furthermore, the characteristic of being a **consumer or a producer** can be of significance. Within one country naturally not everyone is affected in the same way, notably people living in the urban centres are

²⁰¹ Trostle, 2008, p. 25.

²⁰² Wahl, 2009, p. 5.

²⁰³ FAO, April 2008, High Level Conference on World Food Security, p. 16.

²⁰⁴ Senauer; Sur, 2001, p. 68-81.

²⁰⁵ World Bank, Global Economic Prospects January 2012, Sub-Saharan Africa Annex, p. 152.

more predisposed towards falling into poverty than their counterparts in rural areas.²⁰⁶ On the other hand it is a common misconception that the rural population benefits from rising prices. While it is true that **net sellers of food** may benefit from higher prices, it needs to be taken into consideration that net food sellers are typically medium and large farmers. Hence, the rural poor usually do not benefit. To the contrary, in low-income countries poor farmers are typically **net buyers** of food.²⁰⁷ Furthermore, any positive implications for net producers are clearly outweighed by the adverse welfare impact on the net consumers, so that the outcome is an increased level of poverty.²⁰⁸ It follows that the higher the price, the stronger the welfare consequences for consumers, while the opposite is not always true for producers. In theory, the effects of high prices can be mitigated by changing consumption habits and resorting to less expensive food. However, this depends on the **substitutability** and availability of the food concerned. Often domestic alternatives are unavailable.²⁰⁹

According to World Bank estimates as a result of the high food and oil prices in 2007-2008 between 130 and 150 million people were driven into extreme poverty.²¹⁰ For farmers capable of adapting to changing market requirements, higher prices are potentially beneficial, including, and especially, in developing countries. High prices can also be an incentive to invest in the agricultural infrastructure which has been neglected for decades in many developing countries. However, prices rise too quickly and with an extreme degree of volatility.²¹¹ Indeed the effects of price instability were very visible in 2007-2008, when millions of people suffered from hunger and riots were caused.²¹² While it cannot be claimed that this was exclusively fuelled by the behaviour of financial speculators, the role of speculation as a contributing cumulative factor cannot be denied.

²⁰⁶ Arndt, Channing et. al, 2008, p. 1.

²⁰⁷ Ivanic, Martin, Zaman, 2011, p. 14.

²⁰⁸ Ibidem.

²⁰⁹ World Bank, Global Economic Prospects 2009, p. 96.

²¹⁰ Ibidem.

²¹¹ Deutscher Bundestag, 2011, expert statement by Dr. Rafael Schneider, p. 1.

²¹² CNN.com, Riots, Instability Spread as Food Prices Skyrocket, April 14, 2008.

A significant price transmission resulting in severe poverty impacts could also be observed during the **2010/2011 surge in food prices**. With levels even beyond the food price spike of 2008, this rise in food prices, according to a World Bank impact assessment, seems likely to have increased poverty significantly.²¹³ However, this more recent price surge differs in two substantial ways from the crisis in 2008. Firstly, the increases were much more broadly-based across food groups. Secondly, the extent to which changes in world prices of key staples have been transmitted into domestic markets was different.²¹⁴ World Bank president Robert Zoellick has warned about high food inflation as an ingredient of "[...] a toxic brew of real pain contributing to social unrest."²¹⁵ In April 2011 Zoellick outlined that already 44 million people had fallen into poverty since June 2010 as a direct result of higher food prices.²¹⁶

Many studies confirm that the impact of higher food prices on poverty is generally adverse.²¹⁷ Several authors deduced from the evidence regarding the 2008 food price crisis that in most countries poverty will increase when food prices rise substantially. Focusing on West and Central African countries evidence suggests that when cereals cost 50 percent more, the share of the population in poverty increases by 4.4 percent. In sub-Saharan Africa already a 3.5 percent increase would be equal to about 30 million persons falling into poverty.²¹⁸ It has been estimated that the 2007/2008 price spike translates into an increase in poverty by 105 million people out of the low-income population of 2.3 billion, and it has been concluded that this amounts to a 4.5 percent increase in poverty corresponding to a loss of almost seven years of poverty reduction.²¹⁹

Logically the most vulnerable people are those in Low Income Food Deficit Countries (LIFDCs), the poorest and least developed nations on earth. So what do these people do

²¹³ Ivanic, Martin, Zaman, Hassan, 2011, p. 14.

²¹⁴ Ivanic, Martin, Zaman, Hassan, 2011, p. 2.

²¹⁵ Zoellick, Robert B., World Bank Group President, Remarks at Opening Press Conference, April 14, 2011.

²¹⁶ *Ibidem*.

²¹⁷ Ivanic, Martin, 2008). p. 414.

²¹⁸ Wodon, Zaman, 2008(b), p. 22.

²¹⁹ Ivanic, Martin, 2008, p. 415.

when food prices become too high? Since possibilities to adjust their expenditures are virtually non-existent, high food prices can force poor households to consume foods that are less processed. Usually staple foods such as wheat become the priority, while less fruit, vegetables, dairy products and meat are consumed.²²⁰ This often implies an alarmingly low protein and vitamin intake, which causes nutritional deficiencies that particularly affect children as well as pregnant women and their unborn children. Frequently the immune system is weakened which can have very serious effects, particularly for those affected by long-term diseases such as HIV/AIDS. Nutrition-related diseases generally impair working capacity in adults, which leads to a perpetuation of poverty.²²¹ Even short run price surges both reduce calorie intake and compromise dietary diversity.²²² Being deprived of the most essential dietary needs may have severe lifelong effects, particularly when infants are affected. Foetal and young-child malnutrition can cause stunted growth and harm normal brain development.²²³ Other repercussions include the reduction of savings, the sale of valuable assets like lands and cattle or the taking up of loans. In addition, the capacity to purchase education, health care, or other basic needs is impaired and expenditures on these and other luxuries, such as family planning, are reduced.²²⁴ Because women generally tend to manage the food budget of households they bear much of the suffering. Also, welfare losses for them are on average greater than for male-headed households.²²⁵ Frequently, women are forced to enter insecure and dangerous employment, for instance as sex workers.²²⁶

Food is not only a basic necessity of life, but also an integral part of cultural identity. Thus, not having access to the means traditionally used to satisfy dietary needs, also has cultural implications.²²⁷ Lastly, it should not be ignored that a situation of food deprivation generates potential for conflict, further deteriorating the already poor living

²²⁰ World Development Movement, 2011, p. 1.

²²¹ Vidar, 2005, p. 145.

²²² Skoufias, Tiwari, Zaman, Hassan, 2011, pp. 1-38.

²²³ Vidar, Margret, 2005, p. 145.

²²⁴ FAO 2011(b) , p.6.

²²⁵ FAO, 2008, High Level Conference on World Food Security, p. 40, 41.

²²⁶ Holmes, Jones, Marsden, 2009, p. 7.

²²⁷ Schieck Valente; Suárez Franco, 2010, p. 437.

conditions of those involved.²²⁸

c) IMPACTS ON THE UNITED NATIONS WORLD FOOD PROGRAMME

Another problem indirectly affecting least developed countries and their vulnerable populations are the difficulties that enormous price increases pose for the United Nations World Food Programme (WFP), which provides around 90 million people around the world with food. Due to the higher cost of purchasing grain a large budget deficit was accumulated. Eventually this might compromise the WFP's capability to avoid or mitigate occurring crisis situations.²²⁹

d) INTERIM CONCLUSIONS

While international price movements are not completely translated into domestic prices and not all price fluctuations can be associated with events on the international market, it was demonstrated that numerous developing countries are adversely affected by sharply increased prices. Their populations are too vulnerable to cope with the high prices, even if these prices subsequently decline. Even relatively small increases can have disastrous human rights consequences. Against this background it is clear that extreme price surges amplified by speculation can harm the poor and result in long term, irreversible nutritional damage, especially among children.²³⁰ Macroeconomic and individual effects are interrelated. Adverse impacts on a country's economy indirectly affect their citizens, since the likelihood increases for them to be burdened with cuts in social safety nets, healthcare and education.

²²⁸ Ibidem.

²²⁹ Schumann, 2011, *Hunger Makers*, p. 13.

²³⁰ Robles; Torero; von Braun, Joachim, 2009, p. 7.

CHAPTER THREE: A HUMAN-RIGHTS-BASED APPROACH TO EXCESSIVE SPECULATION

How can the impacts discussed, which threaten the well-being of millions of people, be prevented? It will be argued that without a human-rights-based approach, any other attempt to deal with food security in general and speculation in particular, whether legal or non-legal, will remain incomplete. This might be obvious to human rights advocates. Nevertheless it is important to recall the advantages of a human-rights-based approach. Subsequently, the legal basis of the right to food and its normative content will be examined. Then, attention is devoted to the interrelatedness, interconnectedness and indivisibility of human rights. In addition, the corresponding obligations arising from the right to food are identified and it is explained why States are still the prime duty-bearer. Lastly, the concrete implications for excessive speculation are demonstrated. The notion of extraterritorial obligations is excluded at this stage, as it will be discussed in depth in the subsequent chapter four.

1. THE ADDED VALUE OF A HUMAN-RIGHTS-BASED APPROACH

Why should action to handle excessive speculation be based on human rights? How is the application of the right of everyone to be free from hunger different from conventional food-security strategies? An idea favoured by some international humanitarian organisations is to reduce the right to food to the fulfilment of a basic need, "thus turning the duty holder into the object of needs-oriented international policy".²³¹ As a consequence state measures would be voluntary and left to states' discretion.

Often hunger and starvation are seen as a stroke of fate caused by factors like climate change, drought or war. This is why human rights organisations such as FIAN (Food First Information and Action Network) are encouraging a different perspective by

²³¹ Breining-Kaufmann, 2005, p. 360.

creating awareness for food as an internationally recognised right. The "right" awareness is of vital importance, since it influences the strategies embarked on by policy makers and potentially increases the chances to realise the right to adequate food and overcome the structural deficits hindering its enjoyment. When a social demand, such as being free from hunger and malnutrition, is based on an obligation of the State, then the failure to meet such a demand is turned into a violation of human rights. For this reason the potential of the human rights argument as a transformative and pragmatic approach is enormous.²³² The proclamation of rights raises awareness among individuals that their demands regarding the right to food correspond to State obligations. As a consequence, a transition in the self-perception of people takes place. They no longer consider themselves as victims of history, but perceive themselves as rights-holders.²³³ Instead of being dependent on mere charity, rights arising from clear and legally binding obligations can be claimed. Therefore, the transition evoked by human rights is characterised by empowerment.²³⁴

Furthermore, to value food as a human right means to apply the principles of participation, transparency, non-discrimination and the rule of law and it recognises the importance of promoting equity when making policy decisions by giving priority to disadvantaged and marginalised people.²³⁵

The added value provided by a human rights approach thus further lies in countering the narrow interpretation of satisfying dietary needs by having access to food assistance. Hence, the promotion of a broader understanding, encompassing the right to be protected from excessively high prices through state regulation is encouraged. Moreover, the concept of human dignity, which prevents human beings from being degraded to a mere object of state action, can unfold its full viability only in a human rights framework. It has also been suggested that the dignity foundation of human rights

²³² Food First Information and Action Network (FIAN) International, 2009, p. 8.

²³³ *Ibidem*, p. 9.

²³⁴ Sen, 1992, *Inequality Reexamined*; and Sen, 1999, *Development as Freedom*.

²³⁵ Schieck Valente; Suárez Franco, 2010, p. 439.

enables the derivation of certain positive state obligations.²³⁶ Other advantages related to tackling speculation as a human-rights problem are the individual or collective responsibility of states to provide effective monitoring mechanisms, the obligation to assess the consistency of their actions or omissions with the right to food, and finally the obligation to make available effective recourse mechanisms, enabling people to claim violations of their right at judicial or quasi-judicial bodies.²³⁷

While the right to food might be considered as being vaguely formulated, unlike policy concepts, it is applicable in a very precise manner.²³⁸ Treaty bodies gain special importance, since their authoritative interpretations help the normative content of the concerned right to emerge.²³⁹ Accepting the legally binding nature of treaty commitments as a self-restriction of sovereignty, fosters the enforcement of human rights, because it allows no arbitrary departure from the values previously agreed upon.²⁴⁰ In case of non-compliance with international standards the perpetrating State is stigmatised and pressure from various actors is exerted to ensure compliance with the human right concerned. This is another advantage implied by embedding the issue of excessive speculation in a human rights framework.

Since the **Millennium Development Goals (MDGs)**²⁴¹ are non-justiciable aims to be achieved by the international community, all of the previously stressed weaknesses relating to mere policy goals are easily ascertainable. As a result, some authors point out the risk of undermining the core values and objectives which human rights were conceived to realise.²⁴² Furthermore, the MDG target framework does not meet the requirement that States need to immediately reach a minimum essential level of the rights unless they can demonstrably justify that resources are not available. While the full realisation of the relevant rights may be achieved progressively, steps towards that

²³⁶ Dicke, 2002, p. 119.

²³⁷ Schieck Valente; Suárez Franco, Ana María, 2010, p. 439.

²³⁸ Bourquain, 2008, p. 63.

²³⁹ Ibidem.

²⁴⁰ Ibidem, p. 64.

²⁴¹ See: <http://www.un.org/millenniumgoals/> [accessed 12 July 2012].

²⁴² Decker, McInerney-Lankford., Sage, 2005, p. 49.

goal must be taken within a reasonably short time.²⁴³ Also it can be noted that the MDG project places great emphasis on the mobilisation of financial resources and technical solutions, but less on transforming power relations that are partly responsible for current levels of poverty in developing, and developed, countries. This runs contrary to the indivisibility of civil and political rights and economic, social and cultural rights, which are interdependent and rely on each other for their realisation.²⁴⁴ As has been noted by the Office of the High Commissioner for Human Rights (OHCHR), the MDG targets have partly ignored the legal force and instrumental value of human rights.²⁴⁵

By embedding development in the greater context of human rights, it seems possible to unfold the potential of the MDGs as a catalyst for human rights. However, first it would be necessary to harmonise MDG targets and indicators with human rights standards. If it were to be achieved to establish MDGs as a complementary tool, not disembodied from its human rights context, they could help to strengthen the international human rights framework and enrich its content. Both can be mutually reinforcing, since MDGs potentially provide benchmarks for economic and social rights, and human rights strategies can offer enhanced legitimacy, equity and sustainability to the types of policies needed to achieve the MDGs.²⁴⁶ Currently however, MDGs are not a helpful vehicle to curb excessive speculation.

Hunger and malnutrition cannot be fought efficiently unless responsibilities and corresponding duties are clearly defined. This view seems to be supported by Commitment Four of the Plan of Action of the World Food Summit of 1996 which addresses the link between trade and the right to food, aiming at a coherent interpretation of state obligations in both international trade law and human rights instruments.²⁴⁷ Commitment Seven introduces the concept of mainstreaming the right to

²⁴³ UN CESCR, 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), para. 2.

²⁴⁴ Compare: Chapter 3, 2 c), aa).

²⁴⁵ OHCHR, 2008 p. 4.

²⁴⁶ OHCHR, 2008, Executive Summary.

²⁴⁷ Breining-Kaufmann, 2005, p. 361.

food into all other international legal obligations.²⁴⁸ This shows that human rights, as enshrined in the International Bill of Rights, can serve as the lowest common denominator of human co-existence and should be the ethical basis to shape economic globalisation. The right to food in particular can guide national and international policy makers "toward an agricultural and food system that can guarantee dignity for producers and consumers, while also providing all the conditions for a healthy, diversified, and culturally adequate diet."²⁴⁹ Ultimately, dealing with food speculation from a human rights perspective can help to reconcile international trade and human well-being by focusing on the central object of development, which is the human being.²⁵⁰

2. THE RIGHT TO FOOD

Before a meaningful discussion on the relationship between the right to food and speculation on agricultural commodity markets can be launched, the conceptual foundation of the right to food needs to be clarified.²⁵¹ Food is a most essential good, and therefore plays an important part in each society's culture and policies: embedded in several international human rights instruments, it is a cultural statement, a biological necessity, and also commerce, since technology has increased productivity and thus made trade in food products possible.²⁵² But what is the concrete content of the right to food? What are the concrete obligations and what actors are legally bound by them?

a) THE INTERNATIONAL LEGAL BASIS²⁵³

The right to adequate food enjoys wide recognition in international law. Article 1 paragraph 3, as well as articles 55 and 56 of the UN Charter, were a first step into this direction. Later the Universal Declaration of Human Rights (UDHR) of 1948, based on

²⁴⁸ FAO, 1996, Rome Declaration on World Food Security.

²⁴⁹ Schieck Valente; Suárez Franco, Ana María, 2010, p. 439.

²⁵⁰ Oppong, 2006, p. 5.

²⁵¹ Breining-Kaufmann, 2005, p. 359.

²⁵² Breining-Kaufmann, 2005, p. 341.

²⁵³ While all mentioned treaties legally bind the contracting parties, the legal value of the Universal Declaration is slightly more controversial. See: Hannum, 1998, 144-158.

Roosevelt's *Four Freedoms* of 1941²⁵⁴, which included freedom from want as one of the most fundamental rights,²⁵⁵ made reference to the concept of an adequate standard of living and named the necessary subsistence rights that everyone enjoys.²⁵⁶ Its article 25.1 proclaims the right to food by referring to "[...] a standard of living adequate for the health and well-being [...]" of everyone "[...] including food [...]."²⁵⁷ Article 11.1 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) reconfirms this proclamation.²⁵⁸ Furthermore, in article 11.2 it establishes an absolute minimalist standard concerning the right to food and clarifies that States have certain core obligations to address.²⁵⁹ It also stresses that measures needed to ensure compliance with the proclaimed right shall be taken individually and through international co-operation. Already article 28 of the UDHR recognises the co-dependency of national and international measures in the fulfilment of human rights.²⁶⁰ It states that "everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realised."²⁶¹

Several international treaties concerning the rights of vulnerable groups also contain provisions or at least references to the right to food. The Convention on the Rights of the Child, in article 24.1 (c), calls on State parties to take action to combat disease and malnutrition through the provision of adequate nutritious foods. In its article 27.3 it further elaborates on the need to provide material assistance and support programmes also with regard to nutrition.²⁶² The Convention on the Elimination of All Forms of Discrimination against Women (Articles 12 and 14)²⁶³; the Convention Relating to the Status of Refugees (Articles 20 and 23)²⁶⁴; the Convention Relating to the Status of

²⁵⁴ For a reproduction of this speech see: Good, 1984, pp. 384-385.

²⁵⁵ Johnson, 1987, pp. 19-48.

²⁵⁶ Breining-Kaufmann, 2005, p. 360.

²⁵⁷ UN GA, 10 December 1948, Universal Declaration of Human Rights.

²⁵⁸ UN GA, December 16, 1966, International Covenant on Economic, Cultural and Social Rights, art. 11.

²⁵⁹ Barth Eide, Kracht, 2005, Chapter 4, p. 103.

²⁶⁰ De Schutter; Y Cordes, 2011(b), p. 23.

²⁶¹ UN GA, 10 December 1948, Universal Declaration of Human Rights.

²⁶² UN GA, 20 November 1989, Convention on the Rights of the Child, p. 3.

²⁶³ UN GA, 18 December 1979, Convention on the Elimination of All Forms of Discrimination Against Women, p. 13.

²⁶⁴ UN GA, 28 July 1951, Convention Relating to the Status of Refugees, p. 137.

Stateless Persons (Articles 20 and 23)²⁶⁵; and the Indigenous and Tribal Peoples Convention (mainly Articles 14 to 19)²⁶⁶ recognise the right to food as well.

Additionally, there are regional human rights protection mechanisms embracing the right to adequate food. Most notably, article 12 of the Additional Protocol to the 1969 American Convention of Human Rights gives explicit recognition to the right to adequate nutrition.²⁶⁷ The African Charter on Human and Peoples' Rights²⁶⁸ contains no explicit recognition of the right to food. Nevertheless, several other rights, such as the right to health, are recognised in article 16 and can be interpreted as protecting the right to food, especially in the light of article 60 which stipulates other international human rights instruments as sources of inspiration for the Commission's task to promote, protect and interpret to provisions of the charter (article 45).²⁶⁹

Within the Council of Europe's ambit of human rights protection the European Social Charter makes no specific reference to the right to food. The omission to include the right to food can be seen as intentional, since the European countries drafting it considered that there was no need to protect this right as long as the right to work, the right to social security and the right to social welfare were guaranteed. Indeed, it proclaims “the right of workers to a remuneration such as will give them and their families a decent standard of living” (Part II, Article 4.1); the right “to establish or maintain a system of social security” (Article 12); and “the right to social and medical assistance” (Article 13).²⁷⁰ While these rights are important complements to the right to food, it shows that the protection of the right to food at the European level is only partial.²⁷¹

²⁶⁵ UN GA, 28 September 1954, Convention Relating to the Status of Stateless Persons, p. 117.

²⁶⁶ International Labour Organization (ILO), 27 June 1989, Indigenous and Tribal Peoples Convention.

²⁶⁷ Organization of American States, 16 November 1999, Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights.

²⁶⁸ Organization of African Unity, 27 June 1981, African Charter on Human and Peoples' Rights.

²⁶⁹ Golay ; Özden, 2005, p. 13.

²⁷⁰ Council of Europe, 18 October 1961, European Social Charter.

²⁷¹ Golay ; Özden, 2005, p. 14.

b) THE NORMATIVE CONTENT

"Hunger is exclusion. Exclusion from the land, from income, jobs, wages, life and citizenship. When a person gets to the point of not having anything to eat, it is because all the rest has been denied. This is a modern form of exile. It is death in life [...]"²⁷²

Since the ICESCR deals more comprehensively than any other instrument with the right to food, the expert interpretation provided by the Committee on Economic, Social and Cultural Rights (CESCR) serves as an excellent source to define the normative content of this right. Although General Comments are not legally binding *per se* they "can be viewed as authoritative interpretative instruments, which give rise to a normative consensus on the meaning and scope of particular human rights."²⁷³ According to General Comment No. 12 "the right to adequate food is realised when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement."²⁷⁴ Further the Committee has identified a core content implied by the right to food. Food needs to be available "[...] in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture." Accessibility, understood physically as well as economically, is also part of the core content and requires food to be accessible "[...] in ways that are sustainable and that do not interfere with the enjoyment of other human rights."²⁷⁵ Economic accessibility demands that the financial costs of purchasing food still leave room for the satisfaction of other basic needs. Both access and availability need to be adequate, taking into account the prevailing social, economic, cultural, climatic, ecological conditions. In addition, both concepts are also closely linked with the principle of sustainability, because the right to adequate food has to be ensured in the long run, so that its enjoyment by future

²⁷² De Castro, Josué, former President of the Executive Committee of the Food and Agriculture Organization of the United Nations from 1952-1956, as quoted in: FAO, 2004, Right to Food Case Study: Brasil, p. 9.

²⁷³ Conway, 2008, Abstract.

²⁷⁴ UN Committee on Economic, Social and Cultural Rights (CESCR), 12 May 1999, General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant), paragraph 6.

²⁷⁵ Ibid. paragraph 8.

generations is not impaired.²⁷⁶

The ultimate objective of promoting food security and the right to adequate food can be seen in achieving nutritional well-being for the individual. The human nutritional status is determined by the interplay of at least three conditions which have to be met cumulatively. These determinants relate to "food, health and care, [...] with education as a cross-cutting dimension."²⁷⁷ Therefore the full realisation of the right to adequate nutrition will only be achieved if complementary measures in the field of health and care for the vulnerable, and education are taken.²⁷⁸

c) THE INTERCONNECTEDNESS OF HUMAN RIGHTS

A closer look at the concepts of indivisibility and interconnectedness of human rights reveals how the right to food is linked with other human rights.

aa) ECONOMIC, SOCIAL AND CULTURAL RIGHTS AS A DIFFERENT CATEGORY OF RIGHTS?

The Vienna Declaration of the United Nations stated in 1993 that "all human rights are universal, indivisible, interdependent and interrelated. Thus the international community must treat human rights globally in a fair and equal manner, on the same footing, and with the same emphasis [...]."²⁷⁹ Unfortunately political and civil rights and economic, social and cultural rights are still largely perceived as separate categories of rights.²⁸⁰ Historical contextualisation shows that the separate existence of the two International Covenants is a product of ideological divisions during the Cold War.²⁸¹ Western countries had given priority to civil and political rights departing from ideas of individualism, liberalism and capitalism. Similarly the Soviet bloc countries have tended to give priority to economic, social and cultural rights, focusing on persons as

²⁷⁶ Ibid, paragraph 7.

²⁷⁷ Barth Eide; Kracht, 2005, Chapter 4, p. 106.

²⁷⁸ Barth Eide; Kracht, 2005, Chapter 4, p. 106.

²⁷⁹ UN GA, 12 July 1993, Vienna Declaration and Programme of Action, para. 5.

²⁸⁰ Gómez, 2009(a), p. 38.

²⁸¹ Orúa Orúa, 2009, p. 102.

social beings and the concept of collectivism, to the detriment of civil and political rights.²⁸² The UDHR included both, because it was based on the principle that the different rights could only successfully exist in combination. Even the preambles of the two Covenants recognise that "[...] the ideal of free human beings enjoying freedom from want can only be achieved if conditions are created whereby everyone may enjoy his economic, social and cultural rights, as well as his civil and political rights [...]". Opponents of the indivisibility of human rights argue that economic, social and cultural rights are fundamentally different from civil and political rights and require completely different approaches. Arguments that economic and social rights are positive and require an active provision of entitlements by the state, that they are costly whereas civil and political rights are free of cost or that they are even non-justiciable and only formulate vague aspirations and goals are still common.²⁸³ However, examples can be easily found which do not fit into the above categorisation. For instance, maintaining a judicial system (a fundamental requirement of the civil right to due process) is positive and resource-intensive; while the social right to housing is precise, justiciable and can be a real legal right.

The European Court of Human Rights (ECtHR) in its interpretation and application of the European Convention on Human Rights (ECHR) has gradually expanded its jurisprudence to many dimensions of economic and social rights, which are not *expressis verbis* foreseen by the Convention. This illustrates the growing recognition of the interdependence between the two "categories" of human rights. The potential of the ECtHR to promote social justice is best illustrated by the case *MSS versus Belgium and Greece*.²⁸⁴ In this case concerning an asylum seeker being sent from Belgium to Greece in alleged conformity with the EU's Dublin II regulation, the Court noticed that "whilst the Convention sets forth what are essentially civil and political rights, many of them have implications of a social or economic nature."²⁸⁵ Further it stated that "[...] an interpretation of the Convention may extend into the sphere of social and economic

²⁸² Ora Ora, 2009, p. 75.

²⁸³ Eide, 2001, p. 10.

²⁸⁴ Email Egbert Myjer, Judge at the ECtHR, 4 June 2012.

²⁸⁵ Council of Europe: ECtHR, 21 January 2011, *M.S.S. v. Belgium and Greece*.

rights." Among other things the applicant did not have access to adequate food. The applicant's living conditions, *inter alia* characterised by a lack of food, amounted to inhuman or degrading treatment as prohibited by article 3 of the ECHR.

In light of the foregoing it follows that economic social and cultural rights are closely related to civil and political rights. This is true for the right to food as well. Civil and political rights are a prerequisite for defending one's economic, social and cultural rights, but this reasoning also applies vice versa. For instance, the non-compliance with the right to adequate food deprives people of the physical and mental strength to make use of their civil and political rights and freedoms such as the rights to freedom of expression and to assembly and association. An insufficiently nourished person, therefore, tends to be unorganised and have enormous difficulties articulating his or her demands. Consequently any real exercise of the right to political participation remains illusory unless the fundamental right to freedom from hunger is met.²⁸⁶

bb) THE EFFECTS ON OTHER ECONOMIC, SOCIAL AND CULTURAL RIGHTS

The effects of excessive speculation on the right to food have already been shown. The following will demonstrate some direct impacts on other selected economic, social and cultural rights. Additionally, as explained earlier²⁸⁷, macroeconomic instability amplified by speculation, can manifest itself in cuts in governmental spending to the detriment of the enjoyment of various human rights.

The right to health, as formulated in article 12 of the ICESCR, and the right to food are especially closely related. The former seeks to ensure the enjoyment of the highest attainable standard of physical and mental health. Moreover the General Comment dealing with the right to health substantiates State obligations by requiring them to ensure the enjoyment of a variety of facilities, goods, services, and conditions that represent the necessary preconditions for the realisation of this standard.²⁸⁸ Excessively

²⁸⁶ FIAN International, 2009, p. 12.

²⁸⁷ See Chapter Two, 2 a).

²⁸⁸ UN CESCR, 11 August 2000, General Comment No. 14: The Right to the Highest Attainable Standard

high food prices affect socio-economic preconditions crucial for human well-being. In the previous chapter it was already illustrated how poor nutrition is "[...] affecting the whole life circle."²⁸⁹

In addition to the effects of speculation on the right to food and the right to health, there are effects on other rights which are less obvious. **Human dignity** may not be recognised as a separate human right, but certainly there is an indivisible link with the right to adequate food and the inherent dignity of the human person.²⁹⁰ Since the right to food is indispensable for the fulfilment of other human rights, the link is particularly strong.

Groups of people already socially vulnerable and disadvantaged face the most difficulties to afford sufficient nutritional intake. For migrant workers, disabled people, minority groups, refugees and indigenous people high food prices driven by speculation can quickly render adequate food unaffordable. The vulnerability of women deserves special emphasis, especially because of the significant role they have in ensuring the economic survival of their families while being part of the non-monetised sector of the economy.²⁹¹ Clearly higher food prices have detrimental effects on the mentioned groups, because they exacerbate the daily struggles for a life in dignity. For these reason the **right to non-discrimination** can be identified as being immensely affected by excessive speculation.

The right to education, as spelled out in article 13 of the ICESCR, not only plays an important role in the facilitation of the full enjoyment of the right to food²⁹², but difficulties to afford adequate food also affect the right to education. As already mentioned in the previous chapter, households might be forced to cut their expenses for education. Parents might be forced to take their children out of school and oblige them

of Health (Art. 12 of the Covenant), para. 9.

²⁸⁹ Vidar, 2005, p. 145.

²⁹⁰ Vidar, 2005, p. 141.

²⁹¹ Ibid., p. 143.

²⁹² Ibid., p. 147.

to contribute to the household income in order to compensate the increase in staple food prices. High food prices thus have an effect on economic access to schools. The aim of education to fully develop the human personality is also endangered by another aspect: Good nutrition is essential for the ability to concentrate and learn. This means that malnourished children are at risk of being excluded from a proper development of their personality and cognitive abilities. For this reason it has been observed that compulsory and free education becomes meaningless for the malnourished child.²⁹³

The right to work and the right to food are interrelated as well. Among other things, the right to work, as guaranteed in articles 6 and 7 of the ICESCR, includes a free choice of work, just and favourable conditions of work, a safe and healthy working environment, periodic recreation, and adequate working conditions. An individual faced with food prices, so excessive that the household income is insufficient to feed his or her family, might be forced to sacrifice these rights and accept an employment inconsistent with the human right to work. "On the other hand, [...] hungry and malnourished people are less able to work and participate in the economy."²⁹⁴ This statement can be supported by estimates of productivity costs of malnutrition in India, Pakistan and Bangladesh, which may exceed 2 or 3 percent of the GDP.²⁹⁵

The ICESCR further guarantees the **right to social security** (article 9), which aims at "[...] ensuring to disadvantaged and vulnerable persons the chance of conducting a life free from want and consistent with human dignity."²⁹⁶ When the right to adequate food becomes a priority, investment in social security becomes less important, because the latter is a matter of sustainability rather than urgency. Therefore high food prices may impair the function of social security²⁹⁷ in poverty reduction and alleviation and can contribute to social exclusion.

²⁹³ Vidar, 2005, p. 147.

²⁹⁴ Ibid., p. 148.

²⁹⁵ Horton, 1999, Susan, p. 251, table 3.

²⁹⁶ Vidar, Margret, 2005, p. 149.

²⁹⁷ See UN CESCR, 4 February 2008, General Comment No. 19: The right to social security (Art. 9 of the Covenant), Introduction.

Finally, when food becomes too expensive, **cultural aspects of the right to food** can be affected. People might be forced to sell their lands. This not only poses an additional risk to the ability of rural people to feed themselves, but it also impacts cultural identity. Especially for indigenous peoples ancestral and community territories represent more than a source of nutrition.²⁹⁸ Also, as General Comment No. 12 clarifies, food needs to be acceptable within a given culture.²⁹⁹ Indeed, it is important to acknowledge that individuals as well as groups may have food preferences and habits.³⁰⁰ It follows that the substitutability of overpriced food is not only a matter of availability but also of cultural adequacy.

d) THE CORRESPONDING OBLIGATIONS

aa) THE ADDRESSEES OF OBLIGATIONS RELATED TO THE RIGHT TO FOOD

Before the content of the obligations corresponding to the right to food can be focused on, their addressees must be named. Instead of concentrating on States would it not be more feasible to follow another path, such as voluntary guidelines for transnational corporations aimed at social corporate responsibility? It is argued by many that transnational corporations gradually resume more responsibility by establishing human rights impact assessment mechanisms to avoid human rights violations and preventing, mitigating and remedying any harm caused. Indeed, international pressure exerted by global civil society on businesses can be efficient to some extent to achieve this goal. However, until now only States are the signatories of international treaties defining and protecting human rights. Certainly, at first a glance direct responsibility regarding excessive speculation rests with banks, insurances, pension funds and other private investors. Yet, the following will explain why this paper will focus on the legal responsibilities of States.

²⁹⁸ Vidar, 2005, p. 152.

²⁹⁹ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant), paragraph 8.

³⁰⁰ Vidar, 2005, p. 154.

In June 2011, the UN Human Rights Council endorsed the "**Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework**" proposed by UN Special Representative John Ruggie.³⁰¹ These are intended to be an "authoritative focal point around which the expectations and actions of the relevant stakeholders could evolve"³⁰² and its "normative contribution lies not in the creation of new international law obligations but in elaborating the implications of existing standards and practices for States and businesses."³⁰³

The Guiding Principles neither create legal obligations for transnational corporations nor do they identify such rules in the existing international human rights framework. What is required of businesses to ensure the enjoyment of human rights is formulated merely as an expected conduct and not as a legally binding standard which would include sanctions for non-compliance. The Guidelines outline that business enterprises should act with due diligence to prevent infringements on the rights of others and to address adverse impacts with which they are involved. This expected conduct exists independently of States' abilities and willingness to fulfil their own human rights obligations and does not diminish those obligations.³⁰⁴ It has been criticised that the Special Representative has failed to acknowledge that corporations do carry a legal respect-obligation under international human rights law. More concretely it has been argued that "[...] the state's duty to protect strongly draws upon legal obligations of other actors such as corporations to respect human rights. Without this the first pillar of the Ruggie framework, the obligation of states to protect, would become an empty shell."³⁰⁵ Clearly, it would be desirable to hold private, and particularly transnational corporations, legally accountable for human rights violations. However, until such developments become realities the contracting parties of international human rights instruments should be the focal point of any debate on human rights obligations.

But are States capable to comply with their obligations in today's globalised world? In

³⁰¹ United Nations Human Rights Council (HRC), A/HRC/RES/17/4, *Resolution on human rights and transnational corporations and other business enterprises*.

³⁰² UN HRC, A/HRC/17/31, Introduction to the Guiding principles, para 5.

³⁰³ *Ibid.*, para 14.

³⁰⁴ *Ibid.*, II A para. 11.

³⁰⁵ Jägers; Genugten, 2011, p. 2.

the past concerns have been expressed concerning **the demise of the State** as a response to the pressures of globalisation. Has globalisation led to a point where the State is no longer capable of steering its own course?³⁰⁶ Has state power eroded, is the State even withering away? Today, globalisation and particularly the globalisation of capital is often seen as inevitable, unintentional, as non-actor driven and as resulting in convergence.³⁰⁷

Globalists present globalisation as a consequence and not as an initiative or a will, rather it is described as something happening to us. "Anonymous forces are apparently beyond our reach and scope, and are therefore not manageable".³⁰⁸ Seeing globalisation as a process without agents able to influence processes leads to an absence of will to regulate markets and to intervene when market conditions are inconsistent with human rights.³⁰⁹ Transposing these thoughts to the problem of excessive speculation on international food commodity markets, the presented arguments can easily be refuted. People suffering from food insecurity as a consequence of international price volatility is not a natural phenomenon without alternatives; rather it is an actor-driven process. It is important to note that speculators owe their powerful role to the non-regulatory approach to food commodity derivatives pursued by states. Thus, States, who are still the principal duty-holders for human rights protection, should take action to ensure the enjoyment of human rights.

Empirical research suggests that despite the pressures of globalisation, States, especially stronger ones of the world's northern regions, retain substantial capacities in terms of policy options, market regulation and market intervention.³¹⁰ The legal accountability arising from international treaties is the strongest argument to focus on States when addressing violations of human rights standards. For this reason, theories of decline and retreat of the State "[...] are now widely discounted."³¹¹

³⁰⁶ See: Cable, 1995, pp. 23-53; Dunn, 1995; Griffin, 2003, pp. 789-807.

³⁰⁷ Pikalo, 2007, p. 21.

³⁰⁸ Ibidem, p. 23.

³⁰⁹ Ibidem.

³¹⁰ Ibidem, p. 18.

³¹¹ Scholte, 2004, p. 1052.

In spite of the State's role as the prime duty-bearer, the discussion on how to reform the commodity futures markets should not only focus on governmental and institutional regulation, which is complicated by the prevailing opacity, but also take into account the responsibility of speculators and financial firms themselves.³¹² So far the topic of Corporate Social Responsibility (CSR) of companies has been neglected in the debate. A good entry point for addressing the harmful effects of speculation could be supply chain responsibility which is included in many CSR codes and initiatives.³¹³ Generally, the concept of socially responsible investment (SRI) should be given more weight, thereby combining financial objectives with considerations related to environmental, social and governance issues. Already there is an increasing acceptance of SRI as demonstrated by the large number of investors subscribed to the United Nations Principles for Responsible Investment (UNPRI).³¹⁴ On the other hand, looking at the list of signatories to the UNPRI³¹⁵, one quickly discovers all too familiar names like Allianz SE, Deutsche Bank, Goldman Sachs and others which immediately calls into question the seriousness of their adherence to these principles. Of course, "[...] the idea that investors [...] should not achieve their goals by investments that externalise their costs onto society as a whole, including financial instability"³¹⁶ is essential for the promotion of the right to food. But it is even more crucial to translate this understanding into commitment. In conclusion it seems preferable to view CSR as a complementary instrument to State obligations. Certainly, at the current stage it cannot substitute the State obligation to protect people from the adverse impacts of speculation.

³¹² Kerckhoffs, van Os, Vander Stichele, 2010, p. 9.

³¹³ Ibidem.

³¹⁴ Ibidem.

³¹⁵ Signatories to the Principles for Responsible Investment. Available at: <http://www.unpri.org/signatories/> [accessed 12 July 2012].

³¹⁶ Kerckhoffs, van Os, Vander Stichele, 2010, p. 9.

bb) THE CONTENT OF STATE OBLIGATIONS

Obligations can be negative or positive, and States can be directly or indirectly responsible for breaches of human rights standards. Direct responsibility arises when the state itself is the agent of harm, whereas the nexus otherwise is indirect.³¹⁷ The most self-evident obligation is the State's duty not to interfere with the enjoyment of adequate nutrition. Yet, the right to food involves the existence of a multiplicity of actors, particularly because the satisfaction of nutritional needs has been, to a large extent, entrusted to markets. Therefore, other dimensions of obligations beyond the State's respect for human rights need to be considered, without which the scope of protection would be incomplete. In parallel to the negative duty of non-interference, States under certain circumstances might be bearing an "obligation to do something". Relationships between natural and / or legal persons can be the source of conflicts threatening the enjoyment of human rights as well. Still, harm to human rights, in the absence of direct duties being placed on private entities, has to be prevented by States. Such *positive obligations* are recognised by the jurisprudence of the ECtHR as requiring national authorities to take the necessary measures to safeguard a right³¹⁸ and to adopt reasonable and suitable measures to protect the rights of the individual.³¹⁹ If a private actor infringes upon a provision of international human rights law and if this conduct originates in a failure of a certain State, the latter should be held accountable. Protection requires positive measures, but can overlap with negative obligations as well. Hence "elements of abstention and action coexist in the conduct of the State."³²⁰ Concretely, looking at the case of excessive speculation, States can have a negative duty not to interfere with the right to food entailing the prohibition to pass laws that deregulate food commodity markets, while they might also be positively obliged to intervene in insufficiently regulated markets.

As a consequence the right to food, like any other human right, is characterised by the

³¹⁷ Engström, 2002, p. 11.

³¹⁸ Council of Europe (CoE): ECtHR, 23 September 1994, case of Hokkanen v. Finland.

³¹⁹ CoE: ECtHR, 9 December 1994, case of López Ostra v. Spain.

³²⁰ Akandji-Kombe, 2007, p. 12.

imposition of a tripartite nature of human rights obligations: the **obligations to respect protect and fulfil**, the latter incorporating both an obligation to facilitate and, only as a last resort, an obligation to provide.³²¹

The State's duty to protect requires monitoring and regulating the conduct of the relevant private entities.³²² With regard to the phenomenon of excessive speculation this type of obligation is highly relevant, since it requires States to take measures that prevent third parties from interfering with the enjoyment of rights. Rather than the State itself or its agents it is private entities engaging in food commodity speculation and thereby adversely affecting the right to food.

The obligation to facilitate, as a component of the fulfilment dimension, requires States to adopt appropriate legislative, administrative, budgetary, judicial, promotional and other measures towards the full realisation of the right to food. Therefore this obligation also comes into play, when the question of State regulation of commodity markets is addressed.

Towards the full realisation of all economic, cultural and social rights international assistance and co-operation are indispensable. This decisive role of international joint efforts is stressed by the ICESCR in article 2.1 and reiterated in article 11.2 where State Parties are called on to take the necessary measures "individually and through international co-operation".³²³ General Comment No. 12 further elaborates on the detailed meaning of these provisions. Specifically it states that the contracting Parties should respect the enjoyment of the right to food in other countries, protect that right, and facilitate access to food and provide the necessary aid when required.³²⁴

In addition, General Comment No. 3, complementing General Comment No. 12,

³²¹ Barth Eide; Kracht, Uwe, 2005, p. 107.

³²² Courtis, 2007, p. 324.

³²³ Barth Eide; Kracht, Uwe (eds.), 2005, p. 112.

³²⁴ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate Food (Art. 11 of the Covenant), paragraph 36.

clarifies the scope of State obligations. While, as article 2.1 ICESCR stipulates, the rights contained in the treaty are to be realised progressively, this does not mean that States are free of immediate obligations. While realisation over time is foreseen under the Covenant, this should not lead to depriving State obligations of all meaningful content.³²⁵ Considering the *raison d'être* of the Covenant, which is to establish clear obligations in respect of the full realisation of the rights in question, States cannot be allowed to be completely inactive in the promotion of the right to food. This means that there is an immediate obligation to move as expeditiously and effectively as possible towards the goal of food security. Neither can States arbitrarily take any retrogressive measures.³²⁶

3. THE IMPLICATIONS FOR EXCESSIVE SPECULATION ON AGRICULTURAL COMMODITY MARKETS

The right to food is violated when a State fails to comply with its minimum core obligations. The **lack of regulation** of agricultural commodity markets and thereby allowing speculative bets on food could qualify as a violation of the right to food. Insufficiently regulated entities are specifically addressed in paragraph 19 of the General Comment No. 12. It has already been demonstrated that the right to food is adversely affected by excessive speculation and that this violation coincides with negative impacts on other human rights. Also, there is a causal link between the omission to regulate speculation and the damages. Similarly, **deregulation** of agricultural commodity markets, as it has happened notably in the US (see Chapter I, subchapter 1) constitutes a violation of the right to food, because it represents a retrogressive measure requiring "[...] the most careful consideration and would need to be fully justified by reference to the totality of the rights provided for in the Covenant."³²⁷

³²⁵ UN CESCR, 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), para. 9.

³²⁶ UN CESCR, 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), para. 9.

³²⁷ Ibidem.

Even if States were to argue that they are unable to protect the right to food by regulating the conduct of financial investors, it would not absolve them from their obligations under international human rights law. Certainly, as the General Comment on the right to food points out in its paragraph 17, a distinction has to be made between the **inability and unwillingness** of States to establish whether the omission of regulatory intervention amounts to a violation. On the other hand the same paragraph constitutes a reversal of the burden of proof. States have to demonstrate that every effort has been made to ensure compliance with the right to food. So far States have clearly failed to do so. Taking the case of Germany for instance, the Ministry of Food, Agriculture and Consumer Protection disapproves of immediate regulations against speculation on commodity markets. In a position paper on price volatility and speculation it justifies this inaction by referring to the allegedly insufficient knowledge about the impact of speculation on prices. It is only acknowledged that in certain situations speculative bubbles are thought to be possible and that speculation becoming an independent pricing factor would be problematic. In the opinion of the German government, before misguided developments could be addressed, it is first necessary to carry out further empirical investigation on the impacts of derivatives trading.³²⁸ Until a need for regulatory measures has been proven, Germany will remain inactive. This position not only ignores the precautionary principle, it also disregards the immediate obligation to take steps as immanent to the ICESCR.

As most human rights, the right to food, is **not absolute and can be subject to limitations**. Derogations are allowed within the scope of article 4 ICESCR, which represents the Covenant's general limitation clause. A justification is possible "[...] only in so far as this may be compatible with the nature of these rights and solely for the purpose of promoting the general welfare in a democratic society."³²⁹ This means first of all that the omission of regulation or deregulation allowing speculation must be necessary to achieve a **legitimate objective**. What could be a legitimate aim that justifies States' failure to prevent excessive speculation? At the beginning of this article

³²⁸ German Federal Ministry of Food Agriculture and Consumer Protection, 2011, p.5

³²⁹ UN GA, 16 December 1966, *International Covenant on Economic, Social and Cultural Rights*, article 4.

the origins of futures markets were described. Hedging the risks of market participants and predicting future prices were identified as two advantages related to traditional speculation. However, subchapter I 2 has demonstrated the inefficiency of food commodity markets. Both functions of speculation do not work properly under the current conditions.

Other **conflicting human rights** also need to be taken into account. A conflict could arise with the **right to property**, which due its controversial nature is only included in article 17 of UDHR, but not mentioned in either of the two Covenants of 1966.³³⁰ It contains the entitlement of every natural or legal person to the peaceful enjoyment of his or her possessions.³³¹ Possessions are usually interpreted broadly,³³² so that investment in index funds for example could fall within the scope of the protected legal interest. On the other hand property has significant implications for the distribution of social goods and consequently interferences can be justified as well. A closer look at the problem reveals that the right to property might not be affected, because the existence of a conflict is questionable. As Schumann notes, "not one dollar or euro that flows through investment banks to commodity futures exchanges serves as an investment in the production of raw materials or food. It's all about placing bets."³³³

The Charter of Fundamental Rights of the European Union proclaims in its article 16 the **freedom to conduct a business**.³³⁴ This right might be another legitimate interest and speculation might hence be considered necessary to foster this interest. However this alone is not sufficient to allow a limitation of the right to food.

According to CESCR General Comment No. 3 a decision shall be reached in the light of the principles of **proportionality and reasonableness**, giving priority to the most marginalised and ensuring protection to the core content of the rights.³³⁵ Proportionality

³³⁰ Van Banning, 2001, pp. 36-47.

³³¹ See Council of Europe, 20 March 1952, Protocol 1 to the ECHR.

³³² Carss-Frisk, Monica, 2001, p. 6.

³³³ Schumann, 2011, *Hunger Makers*, p. 65.

³³⁴ European Union, 7 December 2000, Charter of Fundamental Rights of the European Union.

³³⁵ UN CESCR, 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations

requires that a fair balance must be struck between the diverging interests. To answer the question as to whether the failure to regulate speculation is justified by the freedom to conduct a business, it may prove useful to reverse the question. Would a regulation of speculative activities on food commodity markets be justified? The protection of the right to food is without doubt legitimate and necessary. Further it needs to be asked if there is any less intrusive, but equally effective measure other than regulation that prevents excessive speculation. Creating more transparency on the markets concerned should not be seen as a less intrusive measure. Instead, it is a complementary element of other aspects of regulation and a necessary prerequisite for the latter. Therefore equally effective alternatives to regulation are unavailable. In this context, it also has to be noted that regulation would not necessarily imply a ban of speculation as such, but only the prevention of its excessive forms.³³⁶

Ultimately the question is whether the right to food or the freedom to conduct a business should be given priority. In determining the outcome of the question one has to recognise the different weight attached to both interests. When the right to food is at stake, many other rights including the right to life are endangered as well. Moreover, human dignity comes into play, which arguably represents the philosophical foundation of international human rights law and very closely reflects the core content of the right to food. The CESCR affirms that the right to adequate food is indivisibly linked to the inherent dignity of the human person.³³⁷

With this in mind, the right to food has to be given priority. Therefore, a regulatory intervention would not be disproportionate. This implies that States, failing to regulate or deregulating in such a way that speculation threatens people's nutritional well-being, can neither rely on the limitation clause of article 4 ICESCR, nor on any other argument in detriment of the right to food.

(Art. 2, Para. 1, of the Covenant), paragraph 10.

³³⁶ For concrete policy options see the concluding section of the paper.

³³⁷ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate Food (Art. 11 of the Covenant), paragraph 4.

The concept of granting States a **certain margin of appreciation** in their decision which measure to take or not to take, cannot challenge this finding. While States do enjoy a margin of discretion in choosing their approaches to guarantee the right to food,³³⁸ this margin can become very narrow. When physical integrity, health, and life of millions of individuals are concerned it becomes so narrow that any room for manoeuvre vanishes completely.

4. INTERIM CONCLUSIONS

Human rights can be an efficient instrument to counter the profit-oriented forces of globalisation, "[...] with the universalisation of human rights constituting a counterpoint to the globalisation of markets and economies and the ethical challenges arising from the latter."³³⁹

Food speculation can be seen within the broader context of trade liberalisation in agriculture. The latter is frequently seen as a precondition for achieving economic growth and the reduction of poverty in developing countries.³⁴⁰ This common viewpoint among economists is challenged by many. Whatever stance on this matter one takes, it cannot be claimed that only beneficial effects of trade liberalisation exist. Food price volatility, caused by excessive speculation on agricultural commodity markets, is an example of the detrimental effects of trade liberalisation, or rather the lack of regulation of international trade. The United Nations CESCR has pointed out in its General Comment No. 12 that in international agreements the right to food needs be given adequate consideration.³⁴¹ The consideration of non-trade-concerns is a key vehicle for the integration of human rights. For instance, within the WTO framework, Article 20 of the Agreement on Agriculture (AoA) acknowledges the need to reconcile trade concerns with concerns not related to trade. This idea must also be valid for the detrimental

³³⁸ Ibidem, paragraph 21.

³³⁹ Barth Eide; Kracht, 2005, p. 99.

³⁴⁰ Lamy, WTO Director-General, 14 December 2011, Letter to Olivier de Schutter.

³⁴¹ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant), paragraph 19.

effects of excessive speculation.

It has been shown that unregulated speculation amounts to a State violation of the right to food that cannot be justified. It follows that for human rights to be taken into consideration at the trading platforms for agricultural commodities States need to intervene and regulate these markets.

CHAPTER FOUR: THE EXTRATERRITORIAL OBLIGATION TO PREVENT EXCESSIVE SPECULATION

1. THE INSUFFICIENCY OF DOMESTIC HUMAN RIGHTS OBLIGATIONS

When a financial investor violates human rights, the logical initial reaction would be assuming a regulatory failure of the jurisdiction within which the violation takes place.³⁴² However, as Chapter I has shown, speculation originates from exchanges in developed nations like the United States or Switzerland. Recalling chapter II, which has outlined the effects in developing countries, one is confronted with the difficulty that the act of speculation does not take place in the same country where the violation occurs.

Therefore, the key question is how investors can be prevented from engaging in conduct which harms the right to food abroad. The geographical divergence between cause and effect presents a problematic obstacle for the attempt to ensure food security. Calling for domestic adherence to human rights obligations alone will not solve the problem, because food speculation, particularly concerning its effects, clearly has a transnational dimension. The effects are unequally felt among countries. For example, in Germany, on average 10 per cent of the income is spent on food. Families in poorer countries, by contrast, must invest up to 80 per cent.³⁴³ More developed countries are also much less vulnerable to international food price volatility and thus not affected in a way noticeable

³⁴²Engström, 2002, p. 18.

³⁴³Oxfam Germany, 2011, p. 11.

for consumers, since the former are usually not net food importers and dispose of a wide range of instruments to counter the transmission of prices to the domestic level. This illustrates that in rich industrialised nations, high food prices usually do not interfere with the enjoyment of human rights. On the other hand, for people in developing countries, high prices have devastating effects, especially for vulnerable groups. Hence acts or omissions of foreign States, concerning investors, exchanges and markets operating in their jurisdiction, can manifest themselves as economic inaccessibility of food in developing countries.

As will be shown, extraterritorial obligations are the key instrument to regulate the conduct of actors engaging in speculation by providing new rules for the relevant markets. Without them there would be a gap in the protection of human rights which can hardly be reconciled with the *raison d'être* of human rights. For this purpose, this chapter will outline the crucial role of extraterritorial obligations in protecting the right to food in developing countries.

Extraterritoriality in human rights law refers to actions or omissions by one state that have an effect on the human rights of individuals in another state- with or without the other state's agreement.³⁴⁴ Concerning the content of international human rights law it has been held that it "comprises more than mere reciprocal engagements between contracting States"³⁴⁵ and that a new public order has emerged which is "of an objective nature and protect(s) the fundamental rights of individuals (rather) than the interests of contracting States".³⁴⁶

Efforts to make globalisation "fully inclusive and equitable" can only be successful if the States fully honour their commitments to the right to food. This implies exhausting all available resources and taking the necessary steps to ensure the freedom from hunger beyond national borders. The way the United States or Switzerland regulate their food commodity markets and particularly derivatives trading may influence the ability of

³⁴⁴ Skogly, 2006, p. 268.

³⁴⁵ CoE: EctHR, 18 January 1978, case of Ireland v. UK, 291.

³⁴⁶ Orakhelashvili, 2003, 531.

States in Sub-Saharan Africa to realise the right to food for their populations. The capacity to take action against excessive speculation in some countries and the incapacity to do so alongside the exposure to its detrimental effects, call for a careful reflection on the extraterritorial obligations of States. In this connection it is important to take note that entrusting the right to food to markets does not absolve States from their human rights obligations, instead such behaviour is in disconformity with the extraterritorial dimension of duties.

In an increasingly integrated world, the extraterritorial dimension of human rights seems more incumbent than ever. Yet, extraterritorial obligations are not something that needs to be artificially constructed in order to address the challenges of globalisation. While it has to be acknowledged that extraterritorial obligations are possibly the least developed in the theory and practice of international human rights law³⁴⁷, this does not say anything about their existence and their legal value. Instead, it should be seen as a concept immanent to the international human rights system which for decades has not received the attention it deserves.

2. THE FUNDAMENTAL IDEAS BEHIND EXTRATERRITORIAL OBLIGATIONS

The United Nations Committee on Economic Social and Cultural Rights has rightly noted that "in the absence of an active programme of international assistance and cooperation on the part of those States that are in a position to undertake one, the full realisation of economic, social and cultural rights will remain an unfulfilled aspiration in many countries." But burdening States with obligations beyond their borders and jurisdiction is not only a pragmatic approach to human well-being, it is also a moral and legal imperative. Notably the *erga omnes* character of human rights³⁴⁸ can be cited in support of extraterritorial obligations. Human rights obligations do not only exist *inter partes* between the different contracting parties of a human rights instrument. Neither are they only owed to individuals as rights-holders. Instead, the preservation of human

³⁴⁷ Skogly, 2003, p. 404.

³⁴⁸ ICJ, 5 February 1970, case concerning the Barcelona Traction, Light and Power Co. (Belgium v. Spain), para. 33-34.

rights lies in the interest of all States, even in the absence of any specific link between the State and the situation where human rights are violated.³⁴⁹ Therefore, "the legal obligations to ensure the rights in question are owed to the international community as a whole."³⁵⁰ Even more importantly, to understand the added value of the notion of extraterritoriality, it is worthwhile to recall the role of the principles of universality and non-discrimination within the doctrine of human rights.

a) THE UNIVERSALITY OF HUMAN RIGHTS

Human rights rest upon moral universalism and the belief in the existence of a truly universal moral community comprising all human beings.³⁵¹ Thus, from the beginning of their conception, the international human rights discourse has given great importance to the notion of universality. Under this principle, States' obligations do not stop at borders,³⁵² otherwise the commitment to secure human rights equally for everyone everywhere in the world could be disregarded. As the name indicates, the Universal Declaration of Human Rights' main source of inspiration and its foundational value was the universal validity of certain rights intrinsic to all human beings. Perceiving rights as not derived from a link of territorial belonging or nationality, means to overcome the view that human rights are the outcome of a social contract between the rulers and the ruled, and therefore based on contractarian or communitarian values.³⁵³ Quite the contrary, they are enjoyed by individuals simply by virtue of their humanity.³⁵⁴ Accordingly, article 1 of the UDHR affirms that "all human beings are born free and equal in dignity and rights." Article 2 of the UDHR underlines that "everyone is entitled to all the rights and freedoms set forth in this declaration, without distinction of any kind." Overall the body of international human rights law makes it very clear that it envisages "not selective, not relative, but universal respect, observance and

³⁴⁹ De Schutter et. al., 2012, Commentary to the Maastricht Principles on Extraterritorial Obligations, p. 13.

³⁵⁰ Ibidem.

³⁵¹ Fagan, 2005, Chapter 2, Historical origins and development of the theory and practice of human rights.

³⁵² FIAN International, 2009, p. 25.

³⁵³ Skogly; Gibney, 2007, p. 274.

³⁵⁴ Ibidem.

protection."³⁵⁵

Admittedly, the concept of universality is controversial and contested by critics who assert that human values and consequently human rights vary significantly according to different cultural perspectives. Despite all criticism by advocates of cultural relativism, the argument of using universality as a foundational value of extraterritorial human rights cannot be weakened. Firstly there seems to be a consensus regarding "[...] the principle of human worth and human dignity which comes with the respect for fundamental rights and freedoms for all [...]."³⁵⁶ In this connection it has been pointed out that the UDHR "represents a broader consensus on human dignity than does any single culture or tradition."³⁵⁷ Secondly, within the ideological confrontation between relativism and universalism, most attention was devoted to the content of rights, while the obligations for duty-bearers were hardly debated.

b) THE PRINCIPLE OF NON-DISCRIMINATION

Another key concept essential for the discussion of extraterritorial obligations is the principle of non-discrimination. It is closely connected to the universality of human rights and can be seen as its logical extension.³⁵⁸ Both numerous human rights treaties as well as customary human rights law prohibit any arbitrary distinction in the way in which people may enjoy their rights. The UN Charter names non-discrimination as one of the purposes of the United Nations by purporting respect for human rights "[...] without distinction as to race, sex, language, or religion [...]."³⁵⁹ The ICESCR reiterates this statement³⁶⁰ and by adding the words "or other status", indicates the non-exhaustive character of the enumeration. Thus, any list of prohibited grounds for distinction should be logically and implicitly be complemented by "geographic location".

³⁵⁵ Ayton-Shenker, 1995. *Universal Human Rights and International Law*.

³⁵⁶ Skogly, 2007, *Right to Adequate Food*, p. 341.

³⁵⁷ Norchi, Charles, *A Global Agenda*, cited in: Ayton-Shenker, Diana, 1995.

³⁵⁸ Skogly, 2007, *Right to Adequate Food: National Implementation and Extraterritorial Obligation*, p. 341.

³⁵⁹ UN, 24 October 1945, *Charter of the United Nations*, Article 1(3).

³⁶⁰ UN GA, 16 December 1966, *International Covenant on Economic, Social and Cultural Rights*, Article 2(1).

c) INTERIM CONCLUSIONS

Even if a provision of international human rights law seemingly is limited in its geographical reach, it always needs to be interpreted in the light of the principles of universality and non-discrimination. Universality and non-discrimination would be illusionary, if they were only valid for the enjoyment of human rights, but inapplicable for the correlative obligations.

Focusing on excessive speculation, this observation can be confirmed. Developing countries are not in a position to secure the right to food of their citizens, because the exchanges in Chicago or Geneva that enable excessive speculation are located outside their jurisdiction. The detrimental effects manifesting themselves particularly in a violation of the right to adequate food, however, do occur in their territories. The countries, which are able to regulate the conduct of actors under their jurisdiction and to influence the rules of markets functioning in their territories, possess the instrument to prevent excessively high prices in developing countries. This situation plainly exemplifies that to uphold the principles of universality and non-discrimination extraterritorial obligations are indispensable.

3. THE LEGAL FOUNDATIONS OF EXTRATERRITORIAL OBLIGATIONS

In the previous chapter it was emphasised that the Ruggie Principles attempt to capture the *status quo* of obligations with regard to business and human rights. However, an unfortunate weakness of these guidelines needs to be addressed, which have been criticised as using language that contradicts and weakens the clearly established obligations for states.³⁶¹ Extraterritorial obligations of States were not given due recognition. Also some countries, especially the United States³⁶², reject the notion that the right to adequate food gives rise to any international legal obligations.³⁶³ Ruggie's

³⁶¹ Jägers; Genugten, 2011, p. 2.

³⁶² FAO, 2002, Report of the World Food Summit, Annex II: Explanatory Notes/ Reservation.

³⁶³ Barth Eide; Kracht, 2005, p. 112.

statement “at present, States are not generally required under international human rights law to regulate the extraterritorial activities of businesses domiciled in their territory and/or jurisdiction”³⁶⁴ does not adequately reflect the realities of international human rights law. This section will show that extraterritorial obligations have a well established legal basis. In support of this argument it will mainly draw upon the need for **international co-operation and assistance**, which many human rights documents address. Firstly the legal foundations for economic, social and cultural rights are identified. Subsequently, the specificities of the right to food are discussed.

a) GENERAL

Traditionally, human rights obligations concerned rights of citizens against their governments within a certain territory. Outside a State's jurisdiction its sphere of influence was considered marginal, and would constitute an interference with the sovereignty of another State. This understanding is reflected, *inter alia*, in article 2 (1) of the ICCPR which links State responsibility to "territory" and "jurisdiction". Similarly, the ECHR foresees that the "[...] high contracting parties shall secure to everyone within their jurisdiction the rights and freedoms contained in Section 1 of this Convention." These provisions, however, cannot be interpreted without taking the principles of universality and non-discrimination into account. Their interpretation by the UN Human Rights Committee and the ECtHR has followed exactly this path and has acknowledged an extraterritorial reach in certain circumstances.³⁶⁵ Generally it seems unlikely that despite the reference to territory or jurisdiction, drafters had any intention of allowing States to violate human rights abroad.

There are other provisions, which will be examined in the following, whose wording is not susceptible to any restrictive interpretation of human rights obligations existing only vertically within the jurisdiction of a state or horizontally among States. In fact, they lay the foundations for *diagonal obligations* that may exist between a State and individuals

³⁶⁴ UN HRC, A/HRC/17/31, I A 2.

³⁶⁵ See: Skogly, 2006, Beyond National Borders: States' Human Rights Obligations in International Cooperation, Chapters 4, 6 and 7.

in other States.³⁶⁶

Article 1 paragraph 3 of the UN Charter incorporates international co-operation as a means to achieve the life in *larger freedom* envisaged in the preamble.³⁶⁷ Furthermore articles 55 and 56 situate human rights as a vital objective to be achieved through international co-operation.³⁶⁸ What does it mean if States pledge themselves to take "joint action" to promote "universal respect" for human rights, as article 55 (c) in conjunction with article 56 stipulates? It implies that at least some states will act beyond their own borders to achieve this.³⁶⁹ Joint co-operation implicitly recognises an extraterritorial effect of human rights obligations, since only one of the States acting jointly, can logically address the promotion of the respect for human rights domestically, while all the other States involved in the joint action will logically be addressing human rights respect in another state.³⁷⁰ Furthermore, article 56 also calls for separate action in co-operation with the UN. This, seen in conjunction with the provision in article 55(c), which calls for *universal* and not merely domestic respect for human rights, further strengthens the argument of human rights obligations existing beyond national borders.

Most importantly for the implementation of the right to food, **article 2 (1) of the ICESCR** contains an explicit obligation to take steps "individually and through international assistance and cooperation", without making any reference to jurisdiction or territory. Thus, it confirms that the implementation of the rights guaranteed in the Covenant extends beyond national and territorial application.³⁷¹ The second paragraph substantiates this proclamation by containing a prohibition of discrimination. Therefore it can be said that the ICESCR envisages international cooperation as necessary for the full realisation of the rights recognised in it. Claiming that human rights are merely territorial would disregard this principle of international co-operation.³⁷² **General**

³⁶⁶ Skogly, 2003, p. 404.

³⁶⁷ UN, 24 October 1945, Charter of the United Nations.

³⁶⁸ Gómez, 2009(b), p. 7.

³⁶⁹ Skogly, 2007, Right to Adequate Food, p. 343.

³⁷⁰ Skogly; Gibney, 2007, p. 271.

³⁷¹ Skogly, 2007, Right to Adequate Food, p. 344.

³⁷² Skogly; Gibney, 2007, p. 270.

Comment No. 3 on the nature of State parties' obligations sheds some further light on how to interpret article 2 of the ICESCR. It recalls that, "international cooperation for development and thus for the realisation of economic social and cultural rights is an obligation of all States,"³⁷³ and clarifies that,

"the phrase 'to the maximum of its available resources' was intended by the drafters of the Covenant to refer to both resources existing within a State and those available from the international community through international cooperation and assistance."³⁷⁴

b) RIGHT TO FOOD

For the right to food, extraterritorial State duties are especially significant, since it has been noted that "the recent food crises have resulted largely from the policies of international actors."³⁷⁵ The existence of extraterritorial duties arising from the right to food can be deduced from article **11 (1) of the ICESCR**, because for its realisation it recognises the "[...] essential importance of international co-operation [...]". The second paragraph adds that measures to achieve freedom from hunger shall be taken "individually and through international co-operation".³⁷⁶ The CESCR's General Comment No. 12 provides further details by holding that,

"States parties should [...] recognize the essential role of international cooperation and comply with their commitment to take joint and separate action to achieve the full realisation of the right to adequate food. In implementing this commitment, States parties should take steps to respect the enjoyment of the right to food in other countries, to protect that right, to facilitate access to food and to provide the necessary aid when required.

³⁷³ UN CESCR), 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), para. 14.

³⁷⁴ UN CESCR, 14 December 1990, General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), para. 13.

³⁷⁵ FIAN International, 13 March 2012, Press Release.

³⁷⁶ UN GA, 16 December 1966, International Covenant on Economic, Social and Cultural Rights.

States parties should, in international agreements whenever relevant, ensure that the right to adequate food is given due attention and consider the development of further international legal instruments to that end."³⁷⁷

Seen in conjunction with article 2 (1), article 11 ICESCR provides a firm legal basis for extraterritorial obligations in relation to the right to food, and its implementation.³⁷⁸ Also, the drafting history and *travaux préparatoires* regarding both articles verify the intention to extend obligations beyond national borders. The strong emphasis on the framework of international co-operation, contained in articles 4 in conjunction with 24 (2) of the Convention of the Rights of the Child further confirms this transnational dimension of human rights.

4. THE EXTRATERRITORIAL OBLIGATIONS TO TAKE MEASURES AGAINST EXCESSIVE SPECULATION

Towards reaching the goal of preventing adverse effects of speculation the FAO Voluntary Guidelines provide a helpful source of inspiration. Also, the parallels between food security and international environmental protection, visualising a certain degree of comparability between the two, underline the need to impose extraterritorial obligations. Most significantly, and based on the previously presented ideas, the recent Maastricht Principles re-substantiate the nature and scope of extraterritorial obligations, so that conclusions can be drawn for the phenomenon of excessive speculation.

³⁷⁷ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant), paragraph 36.

³⁷⁸ Skogly, 2007, p. 346.

a) THE FAO VOLUNTARY GUIDELINES

The FAO Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, adopted by the 189 Member States of FAO in 2004,³⁷⁹ contain some interesting provisions for the purpose of addressing food security from an extraterritorial angle. Of course the document primarily aims at national food security. This is understandable against the background that "implementation is, from the perspective of the individual, always national."³⁸⁰ Guideline 4 is particularly relevant for the phenomenon of food commodity speculation, since it aims at improving "[...] the functioning of [...] markets, in particular [...] agricultural and food markets."³⁸¹ Moreover, States should "strive to ensure that food, agricultural trade and overall trade policies are conducive to fostering food security for all through a non-discriminatory and market-oriented local, regional, national and world trade system."³⁸² Clearly these provisions cannot be read isolated from section III of the document, which recalls the need for international cooperation as enshrined in article 56 of the UN Charter and urges States and international organisations to "[...] actively support the progressive realisation of the right to adequate food at the national level."³⁸³ The entire section on international measures, actions and commitments is based on the fact that many developing countries face difficulties in realising the right to food within their territories. It also implicitly acknowledges that the interconnectedness of world food markets leads to one country being able to influence food security in another country. This significant impact of trade rules across borders is also illustrated by market rules threatening the economic accessibility of food. More precisely by food derivatives markets allowing unregulated speculation.

³⁷⁹ FAO, 2005, FAO Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security.

³⁸⁰ Skogly, Sigrun, 2007, p. 347.

³⁸¹ FAO, 2005 Voluntary Guidelines, Guideline 4, Sub-Section 4.1.

³⁸² Ibidem, Guideline 4, Sub-Section 4.7.

³⁸³ Ibidem, Section III, para. 4.

b) INTERNATIONAL ENVIRONMENTAL LAW

Comparing food speculation to international environmental law proves to be very instructive, as it "[...] imposes a prohibition on the State to allow the use of its territory to cause environmental damage on the territory of another State."³⁸⁴ Is there any compelling reason to restrict the idea of not allowing the national territory to be used to cause damage in another State to cases of transboundary pollution? As has been demonstrated, excessive speculation has harmful transboundary effects as well. Certainly, reference to the implications of environmental law can facilitate an understanding of food security as entailing extraterritorial obligations.

c) RE-SUBSTANTIATION OF EXTRATERRITORIAL OBLIGATIONS THROUGH THE MAASTRICHT PRINCIPLES

As already mentioned, extraterritorial obligations comprise more than development assistance and a duty to provide. This view is supported by the **Maastricht Principles on Extraterritorial Obligations in the area of Economic, Social and Cultural Rights**, which after years of extensive study, were elaborated by 44 international legal experts at a conference hosted by Maastricht University and the Commission of Jurists in September 2011.³⁸⁵ They have been officially launched at the UN in Geneva and have the potential to close the gap in the protection of human rights, particularly with regard to the right to food. According to the Preamble, the Principles are “drawn from international law” and aim to clarify the content of extraterritorial State obligations with a view to giving full effect to the objectives of the UN Charter and international human rights. The Principles are an authoritative document. This means that the Principles restate and clarify the law that is already there, but they also progressively develop the law.³⁸⁶

³⁸⁴ De Schutter et. al, 2012, Commentary to the Maastricht Principles, p. 35.

³⁸⁵ Available at: <http://www.icj.org/dwn/database/Maastricht%20ETO%20Principles%20-%20FINAL.pdf> [accessed 12 July 2012].

³⁸⁶ Email Prof. Dr. Fons Coomans, 22 May 2012.

As one might expect, the authoritative interpretation of the CESCR confirms that the tripartite typology of obligations (respect, protect, fulfil) is applicable both domestically and extraterritorially.³⁸⁷ The same theory is reflected in General Principle I (3) of the Maastricht Principles. The **obligation to respect** in an extraterritorial context means that States only comply with the right to food, if their actions do not adversely impact this right in a third State. For instance, the effects of EU policies of subsidising sugar need to be assessed from a human rights perspective. It has been convincingly demonstrated that such policies may lead to an export of sugar at dumping prices causing detrimental effects on local farmers in other sugar producing States.³⁸⁸ If such policies constitute a violation of the right to food, can a parallel be drawn regarding the effects of speculation? Although this case might seem similar, the situation is not quite comparable, since States (or in case of the EU the supranational entity upon which States have conferred parts of their sovereignty) are directly responsible for subsidies, whereas in case of speculation they can only provide a regulatory framework for private actors. According to the Articles on the Responsibility of States,³⁸⁹ acts of non-State actors can only be attributed to the State under two alternative conditions. Either the private entity is instructed or controlled by a particular State or it is empowered by the State to exercise elements of governmental authority.³⁹⁰ This is not the case for speculation so that speculation is not directly attributable to any State. The third level, the **obligation to fulfil**, requiring positive steps to facilitate or promote human rights enjoyment,³⁹¹ is indispensable for food security. Yet, the obligation to protect seems to be more narrowly tailored to deal with speculation on agricultural commodity markets.

For this reason a focus on the implications of protect-bound obligations outside a States' territory is more appropriate. The **obligation to protect** entails the State responsibility

³⁸⁷ UN CESCR, 12 May 1999, General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant), paragraph 36.

³⁸⁸ Vandenhole, Wouter, 2007, pp. 73–100.

³⁸⁹ Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries adopted by the International Law Commission, Report of the International Law Commission on the Work of its 53rd session (23 April to 1 June and 2 July to 10 August 2001), UN Doc. A/56/10.

³⁹⁰ See also Maastricht Principles on Extra-Territorial Obligations of States in the area of Economic, Social and Cultural Rights, principle 12.

³⁹¹ UN Sub-Commission on the Promotion and Protection of Human Rights, 29 June 1998, para. 9.

to ensure that private entities, over which they exercise jurisdiction, do not deprive individuals in third countries of their right to food. Consequently, there might be a **duty to regulate** which is well established in international human rights law.³⁹² The failure of the State to adopt regulations, or to implement them effectively³⁹³ is the connecting factor to make a certain conduct indirectly attributable to States. Logically, this implies that States need to exercise due diligence in controlling the behaviour of non-state actors.³⁹⁴ The latter may be national or international private parties over which the foreign State exercises control.³⁹⁵ Accordingly, the General Comment on the right to water further elaborates that "to prevent such abuses an effective regulatory system must be established, [...], which includes independent monitoring, genuine public participation and imposition of penalties for non-compliance."³⁹⁶ Consequently, the regulation of domiciled businesses has been labelled a minimum requirement of international cooperation for addressing abuses by businesses.³⁹⁷ This implies that States are obliged to regulate the extraterritorial activities of businesses domiciled in their territory and/or jurisdiction whenever they have the legal or political means to do so in accordance with the Charter of the United Nations and applicable international law.³⁹⁸ While in the case of speculators, their activities as such are restricted to certain trading platforms mainly located in Europe or the United States, the consequences of these activities are echoed worldwide. Considering the strong virtual component of physical marketplaces it would be unrealistic to not consider excessive speculation as an extraterritorial activity. Therefore, extraterritorial obligations must be applicable with regard to markets and trading platforms as well.

For this purpose it is essential to interpret the concept of extraterritorial jurisdiction broadly. The new Maastricht Principles facilitate a wide understanding of the scope of

³⁹² De Schutter, 2010(b), chap. 4.

³⁹³ De Schutter et al., 2012, Commentary to the Maastricht Principles, p. 34.

³⁹⁴ Maastricht Guidelines on Violations of Economic, Social and Cultural Rights, Maastricht, 1997, para. 18.

³⁹⁵ Skogly, Sigrun, 2007, p. 353.

³⁹⁶ UN CESCR, 20 January 2003, General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), para. 24.

³⁹⁷ FIDH - Worldwide Human Rights Movement, States' obligations to respect and protect human rights abroad, Joint Statement on John Ruggie's Draft Guiding Principles, p. 2.

³⁹⁸ Ibidem.

extraterritorial jurisdiction. According to principle 9 b) the obligations to respect, protect and fulfil extend to situations, "over which State acts or omissions bring about foreseeable effects on the enjoyment of economic, social and cultural rights, whether within or outside its territory." Thus, it is recognised that a State can influence the enjoyment of human rights outside its territory, "even in the absence of effective control or authority over a situation or a person."³⁹⁹ The ECtHR has confirmed this by acknowledging that "a State's responsibility may [...] be engaged on account of acts which have sufficiently proximate repercussions on rights guaranteed by the Convention even if those repercussions occur outside its jurisdiction."⁴⁰⁰ Similarly, the Human Rights Committee has held that each State Party to the ICCPR "must respect and ensure the rights laid down in the Covenant to anyone within the power or effective control of that State Party, even if not situated within the territory of the State Party."⁴⁰¹ This means that acts of States taking place or producing effects outside the national territory may be considered to fall within the scope of jurisdiction of the State concerned.⁴⁰² Furthermore, Principle 13 of the Maastricht Principles specifically references the precautionary principle in stating that "uncertainty about potential impacts does not constitute justification [...]" for the impairment of human rights.

All this shows that excessive speculation should trigger a corresponding extraterritorial State obligation. As a next step it is crucial to look at the possible **bases for protection**. Several possible scenarios evoking the State obligation to protect are mentioned in Principle 25 of the Maastricht Principles:

- a) the harm or threat of harm originates or occurs on its territory;
- b) where the non-State actor has the nationality of the State concerned;
- c) as regards business enterprises, where the corporation, or its parent or controlling company, has its centre of activity, is registered or domiciled, or

³⁹⁹ De Schutter et al., 2012, Commentary to the Maastricht Principles, p. 16.

⁴⁰⁰ CoE: ECtHR, 8 July 2004, *Ilascu and Others v. Moldova and Russia*, para. 317.

⁴⁰¹ UN Human Rights Committee, General Comment 31, *The Nature of the General Legal Obligation Imposed on State Parties to the Covenant*, para. 10.

⁴⁰² UN Human Rights Committee, Communication no. 52/1979, *Lopez Burgos v. Uruguay*, para. 12.2.

has its main place of business or substantial business activities, in the State concerned;

d) where there is a reasonable link between the State concerned and the conduct it seeks to regulate, including where relevant aspects of a non-State actor's activities are carried out in that State's territory

In principle, all of these scenarios can provide the necessary basis for protection. Which alternative is the relevant basis, depends on the specific State concerned. In some States the active personality principle, allowing States to regulate the conduct of its nationals abroad, as contained in scenarios a)-c),⁴⁰³ can provide a basis for protection. In other countries this link of nationality might be more complicated. For instance, there might be a misuse of the privileges of legal personality.⁴⁰⁴ Also, the nationality of an actor engaging in speculation might be difficult to detect, because the distinction between parent company and subsidiary may be unclear.⁴⁰⁵ It is precisely for these cases that principle 25 c) emphasises the "centre of activity" as the decisive criterion. Additionally, principle 25 states that other reasonable links may be the basis for protection as well, thereby leaving open the possibility of a broad interpretation of scenarios triggering the State obligation to protect.

Lastly, it is important to determine whether the country concerned has the **ability to exert influence** to prevent excessive speculation.⁴⁰⁶ What is possible for States? The test as to whether extraterritorial obligations are triggered, will, to a large extent, relate to the level of control or influence that a foreign State has.⁴⁰⁷ Some countries might be hosting one of the world's most relevant trading platforms for agricultural commodities and derivatives trading and simultaneously exercise jurisdiction over several major actors engaged in excessive speculation. Other countries might lack such close proximity to the parties responsible for the adverse human rights impacts. Countries in a

⁴⁰³ De Schutter et al., 2012, Commentary to the Maastricht Principles, p. 37.

⁴⁰⁴ De Schutter et al., 2012, Commentary to the Maastricht Principles p. 38.

⁴⁰⁵ Ibidem.

⁴⁰⁶ See also Maastricht Principles on Extra-Territorial Obligations of States in the area of Economic, Social and Cultural Rights, principle 26.

⁴⁰⁷ Happold, 2003, pp. 77-90.

position to do so, must adopt regulations; those which are not can nevertheless contribute to the protection of human rights by "[...] reporting or social labelling, the use of indicators to monitor progress, the reliance on human rights-based conditions in public procurement schemes [...], or fiscal incentives."⁴⁰⁸

5. INTERIM CONCLUSIONS

States need to bear extraterritorial obligations to avoid gaps in human rights protection. Furthermore it has been shown that an extraterritorial reach of human rights is clearly mandated by the concepts of universality and non-discrimination. Additionally, extraterritorial obligations of States strengthen a more constructivist approach to globalisation, because it can help create awareness that the latter is as an actor-driven and intentional process, which can be interpreted, shaped and regulated. The concept emphasises the role of the State as the main duty holder, while taking into account the necessity to rethink and adjust its obligations. This has concrete implications for agricultural commodity speculation. It means that States are required to regulate the conduct of market participants under their jurisdiction to prevent adverse effects on the right to food other countries.

⁴⁰⁸ De Schutter et al., 2012, Commentary to the Maastricht Principles, p. 40.

CONCLUSION

If another food crisis is to be averted, the conditions, under which speculation in basic food commodities is allowed to take place, need to be addressed. **Recalling the central research question**, whether international human rights law mandates State intervention to curb excessive food speculation, the response that can be given is positive. Clearly, this answer does not apply unreservedly for all States and all circumstances. Yet, it can be concluded that the documented negative effects of unregulated speculation, alongside the interplay of the precautionary principle and positive extraterritorial obligations, call for State action.

For the purpose of demonstrating that State obligations extend beyond territorial borders and encompass more than negative duties, as a prerequisite, it was necessary to show that excessive speculation on agricultural commodity markets amounts to a human rights violation. At the same time it has been established that a genuine human rights based approach is the most appropriate tool to tackle the problem of hunger being aggravated by speculation. A subsidiary aim of this paper was to draw attention to the fact that economic globalisation requires States willing to shape this process by means of an altered understanding of State obligations. For this purpose, the role of the State as the prime duty-bearer was re-substantiated, notwithstanding the complementary efforts necessary from non-state entities. Additionally, the fact of hunger not being a natural phenomenon beyond the reach of policy-makers was stressed.

As a consequence of these findings, States need to assure compliance with human rights, particularly the right to adequate food, through the adoption of a tighter regulatory framework. Towards this goal, first, awareness among governments of the implications of food speculation needs to be raised. This needs to be accompanied by an understanding of the corresponding obligations as outlined in this paper. Then, the main challenge is to **translate understanding into commitment**. For this, the normative content of the right to food needs to be transformed into regulatory measures which guarantee its adherence.

There are many different ways to approach the problem of speculation on agricultural commodity markets. For instance, one possibility would be to try to mitigate the effects of extreme price volatility by reducing the vulnerability of both developing countries and their populations. While it is certainly desirable to limit countries' exposure to global commodity price fluctuations, the starting point of preventing violations of the right to food, should be, to put it simplistically, the perpetrator and not the victim. Merely mitigating the effects of high prices seems inconsistent with a human rights-based approach. Rather the root causes need to be tackled. Nevertheless, the establishment of **physical grain reserves** can help to counterbalance extreme price fluctuations. The focus should however be to curb speculation through State regulation, either individually or collectively. So far, some first steps in the right direction have been taken by *inter alia* the G20 States⁴⁰⁹, the United States^{410 411}, and the European Union⁴¹².

Policies adopted should encompass the following **guiding criteria**. As has been demonstrated in chapter I, agricultural, oil and financial **markets are closely linked**. Thus, to ensure coherence, reform efforts should extend to all forms of derivatives trading.⁴¹³ Also, it is crucial to establish a regulatory body that possesses the **knowledge and expertise** to treat food as a human rights concern rather than an asset class.⁴¹⁴ Regarding the form State regulation needs to take, one must bear in mind, the **traditional function of speculation** directed towards hedging, price predictability and the availability of liquidity for market participants. In addition, it needs to be taken into account that the demonstrated effect of speculation consists in aggravating and amplifying of high prices. Therefore, a complete ban of speculation would clearly be

⁴⁰⁹ G20, Cannes Summit Final Declaration, para. 44. For the newly launched International Agricultural Market Information System see also: <http://www.amis-outlook.org/> [accessed 12 July 2012].

⁴¹⁰ For policies on speculative limits see: <http://www.cftc.gov/IndustryOversight/MarketSurveillance/SpeculativeLimits/index.htm> [accessed 12 July 2012].

⁴¹¹ See also: United States Congress, 2010, Dodd-Frank Wall Street Reform and Consumer Protection Act.

⁴¹² European Commission, 20 October 2011, proposal for a directive.

⁴¹³ De Schutter, 2010(a), recommendation 1.

⁴¹⁴ *Ibidem*, recommendation 2.

disproportionate. Rather, the policies to be adopted should reflect the need to curb speculation characterised by its complete disconnection from fundamental market data.

But how should the excessiveness of speculation be addressed? What should be the goal of commodity derivatives reform? Is it enough to inconvenience speculation? The mere creation of surmountable obstacles is not sufficient. When people's lives are at stake the margin of discretion is narrow. The most efficient policy option needs to be chosen. Therefore, all excessive forms of speculation need to be banned.

Most importantly an efficient framework needs to contain **clear and legally binding rules** for investors to regulate their conduct accordingly. This includes taking targeted measures to prevent price bubbles and jumps in prices. The measures need to be aimed at creating markets which reduce the profit potential for speculators. Considering the existence of many alternative and competing trading platforms, only a comprehensive joint international action is capable of putting into force effective rules regarding derivatives trading.⁴¹⁵

The **concrete measures** to be taken cannot be thoroughly discussed in this paper. However, it seems appropriate to briefly outline some aspects currently discussed to facilitate an understanding of the extent of reformatory requirements.

Creating more **transparency**⁴¹⁶ is a seemingly very abstract measure. Yet, this seems to be the least controversial one. Even experts that deny that speculation causes price volatility agree that opaque markets are problematic. The speed of transactions could be reduced through better **documentation** and more specifically through mandatory **reporting**. Reporting obligations cause deceleration and are particularly needed for issuers of derivative products and for trading activities carried out by so called index traders. Moreover, this needs to apply to over-the-counter trading as well to prevent

⁴¹⁵ Stellungnahme des Sachverständigen der Dr. Rafael Schneider, Deutsche Welthungerhilfe e.V., Ausschussdrucksache 17(10) 512-C, p. 3.

⁴¹⁶ Some progress has been made in this area. See: G20, Cannes Summit Final Declaration, para. 44. For the newly launched International Agricultural Market Information System see also: <http://www.amis-outlook.org/> [accessed 12 July 2012].

evasive movements from regulated to unsupervised trading centres.⁴¹⁷ Beyond this general consensus concerning a higher degree of transparency, measures which could achieve the desired objectives are more disputed.

Certainly it is worth considering to exclude those actors only driven by financial motives and uninterested in the underlying food commodities. However, great difficulties would be posed by the task of distinguishing between accepted and undesired actors. Considering the findings of this article all futures contracts need to be settled through regulated exchanges. This must include – to the maximum possible extent - the **registration** and **clearing** to of OTC derivatives.⁴¹⁸ Another, not alternative but cumulative, tool to be implemented through joint efforts of the international community is the introduction of predetermined quantitative restrictions (*position limits*) for the number of contracts that can be held. Position limits could be set by a European wide regulator in liaison with the CFTC⁴¹⁹ in the United States.⁴²⁰ In the event of previously laid down prices for derivatives being exceeded, trading could be suspended to counteract price distortions and panic. Such an imposition of *price limits* could have a positive effect, but might lead to evasive movements of speculators to less regulated markets. Another tool that could prove to be effective is the introduction of higher *margins* for the customers of futures contracts, which would require them to deposit a higher amount of cash at the exchange's clearing house. Lastly, the introduction of a **financial transaction tax** deserves serious political consideration, since it could generally slow down the activities of financial investors in commodity markets⁴²¹, potentially making bets on food prices less attractive and thereby helping to reduce global hunger.

In Chapter I the completely opaque OTC trade and index funds, marked by its complete

⁴¹⁷ Deutscher Bundestag, 2011, expert statement by Rafael Schneider, p. 3.

⁴¹⁸ De Schutter, 2010(a), recommendation 1.

⁴¹⁹ The Commodity Exchange Act has already authorized the CFTC to impose positions limits, see: <http://www.cftc.gov/IndustryOversight/MarketSurveillance/SpeculativeLimits/index.htm> [accessed 12 July 2012].

⁴²⁰ Jones, 2010, p. 27.

⁴²¹ UNCTAD, June 2011, p. 53

detachment from fundamental market factors, were discussed as aspects which are particularly susceptible to speculation. Since they represent the greatest risk to food security, it might even be warranted, following a careful consideration of undesired side-effects, to **ban OTC** trade of agricultural commodity derivatives. The same reasoning might require States to **ban index funds** whose value is based on agricultural commodity futures.

Generally, the transnational dimension of speculation, and the multiplicity of actors involved, highlights the need for concerted international regulation. Unilateral responses to speculation are unlikely to ensure human rights protection in a sustainable way. As a result, meticulous attention to harmonisation of markets across jurisdictions is required.⁴²² In spite of the need to regulate speculation, the structural problems underlying worldwide food insecurity should not be forgotten. Without these there would not be any financially induced hunger crises. This however, does not change the fact that “the hunger of people must come before the hunger of financial institutions.”⁴²³

⁴²² Better Markets, 2011, p. 14.

⁴²³ Friends of the Earth Europe, available at: <http://www.foeeurope.org/food-speculation> [accessed 12 July 2012].

BIBLIOGRAPHY

Books, journals and other publications

A

Akandji-Kombe, Jean-François, *Positive obligations under the European Convention, A guide to the implementation of the European Convention on Human Rights*, Human rights handbooks, No. 7. Strasbourg: Council of Europe, 2007.

Alston, Philip, *Non-state actors and human rights, Collected Courses of the Academy of European Law*, volume 13 (3). Oxford: Oxford University Press, 2005.

Arndt, Birger; Kahl, Wolfgang (ed.), *Das Vorsorgeprinzip im EU-Recht*. Tübingen: Mohr Siebeck, 2009.

Arndt, Channing; Benfica, Rui; Maximiano, Nelson; Nucifora, Antonio M.D., Thurlow, James T., *Higher Fuel and Food Prices, Economic Impacts and Responses for Mozambique*, IFPRI Discussion Paper 00836. Washington D.C.: International Food Policy Research Institute, Washington D.C., December 2008.

Ash, Michael et al., Letter to the Reconciliation Committee of the US Congress: Regulation of commodities futures markets in the reconciliation of the financial reform bill. Economists committee for stable, accountable, fair and efficient financial reform. 10 June 2010. Available at: <http://ourfinancialsecurity.org/2010/06/economists-support-regulation-of-commodities-futures-markets-in-the-reconciliation-of-the-financial-reform-bill/> [accessed 12 July 2012].

Ayton-Shenker, Diana, *The Challenge of Human Rights and Cultural Diversity*, United Nations Background Note DPI/1627/HR. New York: United Nations Department of Public Information, March 1995.

B

Baffes, John; Haniotis, Tassos, *Placing the 2006/08 Commodity Price Boom into Perspective*, Policy Research Working Paper 5371. Washington D.C.: The World Bank Development Prospects Group, July 2010.

Bank for International Settlements, *OTC derivatives market activity in the second half of 2010*. Basel: Bank for International Settlements, 2011.

Barth Eide, Wenche and Kracht, Uwe (eds.), *The Right to Adequate Food in Human Rights Instruments: Legal Norms and Interpretation*, pp. 99-139, in: *Food and Human Rights in Development*, Vol. 1, Legal and Institutional Dimensions and Selected Topics. Antwerpen/Oxford: Intersentia, 2005.

Bass, Hans Heinrich, *Finanzmärkte als Hungerverursacher?*, Deutsche Welthungerhilfe e.V.: Bonn, 2011. Available at: http://www.welthungerhilfe.de/fileadmin/media/pdf/Themen/Studie_Nahrungsmittelspekulation_Bass.pdf [accessed 12 July 2012].

Barclays Capital, Commodities Research, *The Commodity Investor, Hold on...*, London: Barclays Capital, April 2011.

Barclays Capital, *The Commodity Refiner, Wonderland*. London: Barclays Capital, Autumn 2011. Available at: <http://www.scribd.com/doc/62462815/Barclays-Capital-The-Commodity-Refiner-Wonderland-08162011> [accessed 12 July 2012].

Better Markets, *International Swap Regulation Study, Release No. 34-64926 and File Number 4635* (Opinion to CFTC on position limits on derivatives), Washington D.C., 26 September 2011. Available at: <http://www.sec.gov/comments/4-635/4635-4.pdf> [accessed 12 July 2012].

Borghi, Marco and Postiglione Blommestein, Letizia (eds.), *The Right to Adequate Food and Access to Justice*, Zurich: Schulthess, 2006.

Bourquain, Knut, *Freshwater Access from a Human Rights Perspective, A Challenge to International Water and Human Rights Law*. Leiden/ Boston: Martinus Nijhoff Publishers, 2008.

Breining-Kaufmann, Christine, 'The Right to Food in Trade and Agriculture', pp. 341-381 in Thomas Cottier, Joost Pauwelyn and Elisabeth Bürgi Bonanomi (eds.), *Human Rights and International Trade*. New York: Oxford University Press, 2005.

Byerlee, Derek; Myers, Bob; Jayne, Thomas, *Managing Food Price Risks and Instability in an Environment of Market Liberalization*. Washington D.C.: The World Bank, Agriculture and Rural Development Department, 2005.

C

Cable, Vincent, *The diminished Nation-State: A study in the loss of economic power*, pp. 23-53, in *Daedalus Journal of the American Academy of Arts & Sciences*, volume 124 (2), MIT Press, 1995.

Calliess, Christian, 'Art. 191 AEUV', Rn. 1-54 in Christian Calliess & Matthias Ruffert (eds.), *EUV/AEUV*. Munich: C.H. Beck, 4th edition 2011.

Carss-Frisk, Monica, *The Right to Property, A Guide to the Implementation of Article 1 of Protocol No. 1 to the European Convention on Human Rights*, Human Rights Handbook No. 4. Strasbourg: Council of Europe, 2001.

Clapp, Jennifer, 'The Global Food Crisis and International Agricultural Policy: Which Way Forward', pp. 299-312 in *Global Governance*, Volume 15, 2009.

Commission of the European Union, *Communication from the Commission of the European Union on the precautionary principle*, COM (2000) 1. Brussels: Commission of the European Union, 2 February 2000. Available at: http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf [accessed 12 July 2012].

Coomans, Fons (ed.), *Extraterritorial application of human rights treaties*. Antwerp/Oxford : Intersentia, 2004.

Conway, Blake, *Normative Instruments in International Human Rights Law: Locating the General Comment*, Center for Human Rights and Global Justice Working Paper Number 17. New York: New York University School of Law, 2008.

Cottier, Thomas; Pauwelyn, Joost; Bürgi, Elisabeth (eds.), *Human Rights and International Trade (International Economic Law Series)*. Oxford: Oxford University Press, 2005.

Courtis, Christian, 'The Right to Food as a Justiciable Right: Challenges and Strategies', p. 317-337 in Armin von Bogdandy & Rüdiger Wolfrum (eds.), *Focus: How to speed up the Implementation of the Right to Adequate Food at the International Level*, Max Planck Yearbook of United Nations Law, volume 11. Leiden/ Boston: Martinus Nijhoff Publishers, 2007.

D

Daviron, Benoit; Nango Dembele, Niama; Murphy, Sophia; Shahidur, Rashid, *Report on Price Volatility, A zero draft consultation paper*, Committee on World Food Security, High Level Panel of Experts on Food Security and Nutrition. Rome: Committee on World Food Security, 11 May 2011.

Dawe, David, *Have Recent Increases in International Cereal Prices Been Transmitted to Domestic Economies? The experience in seven large Asian countries*, ESA Working Paper No. 08-03. Rome: The Food and Agriculture Organization of the United Nations, April 2008.

Decker, Klaus; McInerney-Lankford, Siobhán; Sage, Caroline, *Human Rights and Equitable Development: "ideals", issues and implications*. Washington D.C.: World Bank, 2005.

De Schutter, Olivier, *Food Commodities Speculation and Food Price Crisis - Regulation to reduce the risks of price volatility*, Briefing Note 02. Brussels: September 2010(a). Available at: http://www.srfood.org/images/stories/pdf/otherdocuments/20102309_briefing_note_02_en.pdf [accessed 12 July 2012].

De Schutter, Olivier, *International Human Rights Law: Cases, Materials and Commentary*. Cambridge/ New York: Cambridge University Press, 2010(b).

De Schutter, Olivier, 'The Right of Everyone to Enjoy the Benefits of Scientific Progress and the Right to Food: From Conflicts to Complementarity', pp. 304-350 in: *Human Rights Quarterly: A Comparative International Journal of the Social Sciences, Humanities, and Law*, volume 33, no. 2, May 2011(a).

De Schutter, Olivier; Eide, Asbjørn; Khalfan, Ashfaq; Orellana, Marcos; Salomon; Margot and Seiderman, Ian, *Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights*, Advance unedited version, 29 February 2012.

De Schutter, Olivier; Y Cordes, Kaitlin, 'An Introduction to the Issues', pp. 1-27 in Olivier De Schutter and Kaitlin Y Cordes (eds.), *Accounting for Hunger: The Right to Food in an Era of Globalisation*. Oxford/ Portland: Hart Publishing, 2011(b).

Deutscher Bundestag, Ausschussdrucksache 17(10) 512-C, Hearing of the Committee for Food, Agriculture and Consumer Protection on the topic of 'preventing food commodities speculation', expert statement by Dr. Rafael Schneider, Deutsche Welthungerhilfe e.V., 27 June 2011.

Dicke, Klaus, 'The Founding Function of Human Dignity in the Universal Declaration of Human Rights', pp. 111-120 in David Kretzmer and Eckart Klein (eds.), *The Concept of Human Dignity in Human Rights Discourse*. The Hague: Kluwer Law International, 2002.

Dunn, John, *Contemporary Crisis of the Nation-State?* Oxford: Blackwell, 1995.

Griffin, Keith, 'Economic Globalization and Institutions of Global Governance', pp. 789-807 in *Development and Change*, volume 34 (Issue 5), November 2003.

E

Eide, Asbjørn, 'Economic, Social and Cultural Rights as Human Rights', pp. 9-28 in Asbjørn Eide, Catarina Krause, and Allan Rosas (eds.), *Economic, Social and Cultural*

Rights– A Textbook (Second revised edition). Dordrecht/ Boston/ London: Martinus Nijhoff Publishers, 2001.

Engström, Viljam, *Who Is Responsible for Corporate Human Rights Violations?* Åbo: Akademi University Institute for Human Rights, January 2002. Available at: <http://www.abo.fi/media/24259/report2.pdf> [accessed 12 July 2012].

Erben, Cosima, *Das Vorsorgegebot im Völkerrecht*. Berlin: Duncker & Humblot, 2005.

European Commission, Staff Working Document, *Task force on the role of speculation in agricultural commodities price movements: Is there a speculative bubble in commodity markets?* Accompanying document to the communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee of the Regions on food prices in Europe. Brussels: European Commission, 2008. Available at: http://ec.europa.eu/economy_finance/publications/publication13765_en.pdf [accessed 12 July 2012].

European Commission, *Proposal by the European Commission for a directive on markets in financial instruments repealing Directive 2004/39/EC of the European Parliament and of the Council*, Brussels: European Commission 20 October 2011. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0656:FIN:EN:PDF> [accessed 12 July 2012].

F

Fagan, Andrew, *Human Rights*, Internet Encyclopedia of Philosophy – A Peer-Reviewed Academic Resource, 5 July 2005. Available at: <http://www.iep.utm.edu/hum-rts/> [accessed 12 July 2012].

FIDH - Worldwide Human Rights Movement, *States' obligations to respect and protect human rights abroad, Joint Statement on John Ruggie's Draft Guiding Principles*. Available at: http://www.fidh.org/IMG/pdf/States_obligations_to_respect_and_protect_human_rights_abroad-3.pdf [accessed 12 July 2012]

Food First Information and Action Network (FIAN) International, *Advancing the Right to Food, Some Lessons Learned*. Heidelberg: FIAN International, 2009.

FIAN International, Press release: *New Human Rights Principles Launched at UN, Geneva*, Heidelberg, 13 March 2012. Available at: <http://fian.org/news/press-releases/new-human-rights-principles-launched-at-un-geneva> [accessed 12 July 2012].

Food and Agricultural Organization of the United Nations (FAO), *Final Report of the Committee on Commodity Problems: Extraordinary Joint Intersessional Meeting of the Intergovernmental Group (IGG) on Grains and the International group on Rice*. Rome: FAO, September 2010. Available at: http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Grains/Documents/FINAL_REPORT.pdf [accessed 12 July 2012]

FAO Food Price Index, available at: <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/> [accessed 12 July 2012].

FAO, *Report of the World Food Summit: five years later*, Annex II: Explanatory Notes/Reservation. Rome: FAO, 2002
<http://www.fao.org/DOCREP/MEETING/005/Y7106E/y7106e03.htm> [accessed 12 July 2012].

FAO, *The State of Agricultural Commodity Markets, High Food Prices and the Food Crisis - Experiences and Lessons Learned*. Rome: FAO, 2009(a).

FAO, *The State of Food Insecurity in the World - Addressing Food Insecurity in Protracted Crises*. Rome: FAO, 2010.

FAO, *The State of Food Insecurity in the World: Economic Crises - Impacts and Lessons Learned*. Rome: FAO, 2009(b).

FAO/ United Nations World Food Programme/ International Fund for Agricultural Development, *The State of Food Insecurity in the World - How does international price volatility affect domestic economies and food security?* Rome: FAO, 2011(a).

FAO, *Price Volatility in Food and Agricultural Markets: Policy Responses, Policy Report including contributions by FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF*. Rome: FAO, 2 June 2011(b).

FAO, *High Level Conference on World Food Security: The Challenges of Climate Change and Bioenergy*, HLC/08/INF/1. Rome: FAO, April 2008.

FAO, *Right to Food Case Study: Brasil*, at 9, U.N. DOC. IGWG RTFG/INF 4/APP.1. Rome: FAO, June 2004. Available at <http://www.fao.org/righttofood/kc/downloads/vl/docs/AH193.pdf> [12 July 2012].

FAO, *FAO Voluntary guidelines to support the progressive realization of the right to adequate food in the context of national food security*, Adopted by the 127th session of the FAO Council. Rome: FAO, 2005.

Freestone, David; Hey, Ellen, *The Precautionary Principle and International Law – The Challenge of Implementation*. The Hague: Kluwer Law International, 1996.

Friends of the Earth Europe, *Food Speculation*. Available at:
<http://www.foeeurope.org/food-speculation> [accessed 12 July 2012].

Feria Tinta, Monica, 'Justiciability of economic, social, and cultural rights in the Inter-American system of protection of human rights: beyond traditional paradigms and notions', pp. [431]-459 in *Human Rights Quarterly*, volume 29 (2), May 2007.

G

German Federal Ministry of Food Agriculture and Consumer Protection (BMELV), Preisvolatilität und Spekulation auf den Märkten für Agrarrohstoffe. BMELV: Berlin, 8 July 2011. Available in German at:
http://www.bmelv.de/SharedDocs/Downloads/Europa-Internationales/EckpunktepapierPreisvolatilitaet.pdf?__blob=publicationFile [accessed 12 July 2012].

Gilbert, Christopher L., *How to Understand High Food Prices*, Discussion Paper No. 23. Trento: Università degli Studi di Trento, Dipartimento di Economia, 2008. Available at: http://www.unitn.it/files/23_08_gilbert.pdf [accessed 12 July 2012].

Golay, Christophe; Özden, Melik, *Le Droit à l'Alimentation, Un droit humain fondamental stipulé par l'ONU et reconnu par des traités régionaux et de nombreuses constitutions nationales*, Geneva : Centre Europe-Tiers Monde, 2005.

Gómez Isa, Felipe, 'International Protection of Human Rights', pp. 21-48 in Felipe Gómez Isa and Koen De Feyter (eds.), *International Human Rights Law in a Global Context*. Bilbao: Deusto University Press, 2009(a).

Gómez Isa, Felipe, 'Transnational Obligations in the Field of Economic, Social and Cultural Rights', pp. 1-30 in *Revista Electrónica de Estudios Internacionales*, volume 18, 2009(b).

Gonzalez, Carmen G., 'The Global Food Crisis: Law Policy, and the Elusive Quest for Justice', pp. 462-479 in *Yale Human Rights and Development Law Journal*, volume 13, 2010.

Good, Martha H., 'Freedom from want: The failure of the United States to protect subsistence rights', pp. 335-365 in *Human Rights Quarterly*, volume 6, 1984.

Goldmann Sachs, *Annual Report 2009*. Available at:
<http://www.goldmansachs.com/investor-relations/financials/archived/annual-reports/2009-complete-annual.pdf> [accessed 12 July 2012].

Gosh, Javati, *Commodity Speculation and the Food Crisis* (for World Development Movement), October 2010. Available at:
<http://www.wdm.org.uk/sites/default/files/Commodity%20speculation%20and%20food>

%20crisis.pdf [accessed 12 July 2012].

Grisel, Guillaume, *Application extraterritoriale du droit international des droits de l'Homme*. Brussels: Bruylant, 2010.

H

Hachfeld, David; Pohl, Christine; Wiggerthale, Marita, *Mit Essen spielt man nicht! Die deutsche Finanzbranche und das Geschäft mit dem Hunger*. Berlin: Oxfam Germany, 2012.

Hannum, Hurst, 'The UDHR in National and International Law', pp. 144-158 in *Health and Human Rights*, Volume 3(2), 1998.

Happold, Matthew, 'Bankovic v. Belgium and the Territorial Scope of the European Convention on Human Rights', pp. 77-90 in *Human Rights Law Review*, volume 3, 2003.

Hernandez, Manuel; Torrero, Maximo, *IFPRI Discussion Paper 00988, Examining the Dynamic Relationship between Spot and Future Prices of Agricultural Commodities*. Washington: International Food Policy Research Institute, June 2010.

High Level Panel of Experts on Food Security and Nutrition (HLPE), *Price volatility and food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security*, Rome, June 2011.

Holmes, Rebecca; Jones, Nicola and Marsden, Hannah, *Gender vulnerabilities, food price shocks and social protection responses*. London: Overseas Development Institute, August 2009. Available at: <http://www.odi.org.uk/resources/docs/4287.pdf> [accessed 12 July 2012].

Horton, Susan, 'Opportunities for Investments in Nutrition in Low-Income Asia', pp. 246-273 in *Asian Development Review*, volume 17, 1999.

Howland, Todd, 'Multi-State Responsibility for Extraterritorial Violations of Economic, Social and Cultural Rights', pp. [371]-394 in Mashood A. Baderin and Manisuli Ssenyonjo (eds.), *International Human Rights Law – Six Decades after the UDHR and Beyond*. Farnham/ Burlington, VT : Ashgate, 2010.

I

Ivanic, Maros; Martin, Will and Zaman, Hassan; *Estimating the short-run poverty impacts of the 2010–11 surge in food prices, Policy Research Working Paper 5633*, The

World Bank, Development Research Group, Agriculture and Rural Development Team, April 2011.

Ivanic, Maros; Martin, Will, 'Implications of higher global food prices for poverty in low-income countries', pp. 405-16 in *Agricultural Economics*, volume 39(s1), 2008.

J

Jägers, Nicola and Genugten, Willem van, *Corporations and Human Rights: Moving Beyond 'Principled Pragmatism' to 'Ruggie-Plus'*, March 1, 2011. Available at SSRN: <http://ssrn.com/abstract=1844203> or <http://dx.doi.org/10.2139/ssrn.1844203> [accessed 12 July 2012]

Johnson, M. Glen, 'The Contributions of Eleanor and Franklin Roosevelt to the Development of International Protection of Human Rights', pp. 19-48 in *Human Rights Quarterly*, Volume 9, 1987.

Jones, Tim, *World Development Movement Report, The Great Hunger Lottery: How Banking Speculation Causes Food Crisis*, July 2010.

Joseph, Sarah, *Blame it on the WTO? A Human Rights Critique*. Oxford/ New York: Oxford University Press, 2011.

K

Keats, Sharada; Wiggins, Steve; Compton, Julia and Vigneri, Marcella, *Food Price Transmission: Rising International Cereals Prices and Domestic Markets*, UK Department for International Development's (DFID) Food Group, and the Overseas Development Institute, Project Briefing No. 48: London, DFID, October 2010.

Kerckhoffs, Thijs, van Os, Roos and Vander Stichele, Myriam, *SOMO paper, Financing Food - Financialisation and Financial Actors in Agriculture Commodity Markets*. Amsterdam: Stichting Onderzoek Multinationale Ondernemingen, 2010. Available at: <http://europeansforfinancialreform.org/en/system/files/FinancingFood.pdf> [accessed 12 July 2012].

Kracht, Uwe, 'Whose Right to Food? Vulnerable Groups and the Hungry Poor', pp. 119-139 in Wenche Barth Eide, and Uwe Kracht (eds.), *Food and Human Rights in Development, Legal and Institutional Dimensions and Selected Topics*, Volume 1. Antwerpen/ Oxford: Intersentia, 2005.

L

Lagi, Marco; Bar-Yam, Yavni; Bertrand, Karla; Bar-Yam, Yaneer, *The Food Crises: A quantitative model of food prices including speculators and ethanol conversion*.

Cambridge: New England Complex Systems Institute, 2011.

Lambert Abdelgawad, Elisabeth, 'Le principe de precaution dans le système de la Convention Européenne des Droits de l'Homme', pp. [493]-522 in Hélène Ruiz Fabri and Lorenzo Gradoni (eds.), *La circulation des concepts juridiques: le droit international de l'environnement entre mondialisation et fragmentation*. Paris: Société de Législation Comparée, 2009.

Lamy, Pascal, WTO Director-General, *Letter to Olivier de Schutter*, 14 December 2011. Available at

http://www.wto.org/english/news_e/news11_e/agcom_14dec11_e.htm#letter [accessed 12 July 2012].

Lombardi, Marco J.; Van Robays, Ine, *Do Financial Investors Destabilize the Oil Price?* European Central Bank Working Paper Series No. 1346. Frankfurt am Main: European Central Bank, June 2011. Available at:

<http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1346.pdf> [accessed 12 July 2012]

M

Minot, Nicholas, *Transmission of World Food Price Changes to Markets in Sub-Saharan Africa*, *IFPRI Discussion Paper 01059*. Washington D.C.: International Food Policy Research Institute, January 2011. Available at:

<http://www.ifpri.org/sites/default/files/publications/ifpridp01059.pdf> [accessed 12 July 2012].

N

Narula, Smita, 'The Right to Food: Holding Global Actors Accountable under International Law', pp. 691-799 in *Columbia Journal of Transnational Law*, Volume 44 (3), 2006.

O

O'Flaherty, Michael, 'Towards Integration of the United Nations Human Rights Treaty-Body Recommendations: The Rights-Based Approach Model', pp. 589-606 in *Netherlands Quarterly of Human Rights*, volume 24 (4), December 2006.

Organisation for Economic Co-operation and Development (OECD) and Food and Agriculture Organization of the United Nations, *Agricultural Outlook: Average commodity prices to rise in 2010-19*. Paris/ Rome: OECD Publishing and FAO, 2010. Available at: http://www.agri-outlook.org/document/54/0,3343,en_36774751_36775671_45433974_1_1_1_1,00.html [accessed 12 July 2012].

Organisation for Economic Co-operation and Development (OECD) and Food and

Agriculture Organization of the United Nations, *OECD-FAO Agricultural Outlook 2011-2020*. Paris/ Rome: OECD Publishing and FAO, 2011. Available at: <http://www.oecd.org/dataoecd/52/34/48202074.pdf> [accessed 12 July 2012].

Oppong, Richard Frimpong, 'Trade and human rights: a perspective for agents of trade policy using a rights based approach to development', pp. 123-145 in *African Human Rights Law Journal*, Volume 6, 2006. Available at: <http://eprints.lancs.ac.uk/30782/1/R-F-OPPONG-AHRLJ-FINAL.pdf> [accessed 12 July 2012].

O'Riordan, Tim; Cameron, James; Jordan, Andrew, *Reinterpreting the Precautionary Principle*, London: Cameron May, 2001.

Oráa Oráa, J, 'The Universal Declaration of Human Rights', pp. 73-135, in Felipe Gómez Isa and Koen De Feyter, (eds.): *International Human Rights Law in a Global Context*. Bilbao: Deusto University Press, 2009.

Orakhelashvili, Alexander, 'Human Rights Treaties in the Recent Jurisprudence of the European Court of Human Rights', pp. 529-568 in *European Journal of International Law*, volume 14 (3), 2003.

Ortiz, Isabel; Chai, Jingqing; Cummins, Matthew, *Escalating Food Prices: The threat to poor households and policies to safeguard a Recovery for All*. New York: United Nations Children's Fund (UNICEF), 2011. Available at: http://www.unicef.org/socialpolicy/files/Escalating_Food_Prices.pdf [accessed 12 July 2012].

Oxfam Germany, Don't gamble with food! *How the German financial industry is making a business out of hunger*. Berlin: Oxfam Germany, 2011. Available in German at: http://www.oxfam.de/sites/www.oxfam.de/files/20120511_mit-essen-spielt-man-nicht.pdf; [accessed 12 July 2012]. English summary: http://www.oxfam.de/sites/www.oxfam.de/files/englische_zusammenfassung_final.pdf [accessed 12 Jul 2012].

P

Pikalo, Jerney, 'Economic Globalisation, Globalist Stories of the State, and Human Rights', pp. 17-38 in Wolfgang Benedek; Koen De Feyter and Fabrizio Marrella (eds.), *Economic Globalisation and Human Rights: EIUC Studies on Human Rights and Democratization*. New York: Cambridge University Press, 2007.

Prakash, Adam, *Safeguarding Food Security in Volatile Food Markets*. Rome: Food and Agricultural Organization of the United Nations, 2011.

R

Robles, Miguel; Torero, Maximo; and von Braun, Joachim, *When Speculation Matters. IFPRI Issue Brief 57*. Washington D.C.: International Food Policy Research Institute, February 2009.

Roman, Diane, *Droits des pauvres, pauvres droits? Recherches sur la justiciabilité des droits sociaux*. Paris: Centre de Recherches sur les droits fondamentaux, 2010.

S

Schieck Valente, Flavio Luiz; Suárez Franco, Ana María, 'Human Rights and the Struggle Against Hunger, Laws, Institutions, and Instruments in the Fight to Realize the Right to Adequate Food', pp. 435-461, *Yale Human Rights & Development Law Journal*, volume 13, 2010.

Scholte, Jan Aart, 'Governing Economic Globalization: A Response to Keith Griffin', pp.1049-1056 in *Development and Change*, volume 35 (5), 2004.

Schulmeister, Stephan, *Tading Practices and Price Dynamics in Commodity Markets and the Stabilising Effects of a Transaction Tax*. Vienna: Österreichisches Institut für Wirtschaftsforschung, 2009.

Schumann, Harald, *Food Watch Report: The Hunger-Makers - How Deutsche Bank, Goldman Sachs and Other Financial Institutions Are Speculating With Food at the Expense of the Poorest*. Berlin: Foodwatch, 2011.

Sen, Amartya, *Inequality reexamined*, Cambridge, MA: Harvard University Press, 1992.

Sen, Amartya, *Development as Freedom*, New York: Oxford University Press, 1999

Senauer, Ben; Sur, Mona, 'Ending global Hunger in the 21st Century - Projections of the Number of Food Insecure People', pp. 68-81 in *Review of Agricultural Economics*, volume 23 (1), 2001.

Skogly, Sigrun I.; Gibney, Mark, 'Economic Rights and Extraterritorial Obligations', pp. 267-283 in Shareen Hertel and Lanse Minkler (eds.), *Economic Rights: Conceptual, Measurement, and Policy Issues*. Cambridge: Cambridge University Press, 2007.

Skogly, Sigrun, 'The Obligation of International Assistance and Cooperation in the International Covenant on Economic, Social and Cultural Rights', pp. [403]-420 in Morten Bergsmo (ed.), *Human Rights and Criminal Justice for the Downtrodden: Essays in Honour of Asbjørn Eide*. Leiden/ Boston: Martinus Nijhoff Publishers, 2003.

Skogly, Sigrun, 'Right to Adequate Food: National Implementation and Extraterritorial

Obligation’, pp. [339]-358 in Armin von Bogdandy and Rüdiger Wolfrum (ed.), *How to Speed up Implementation of the Right to Food at the International Level?*, Max Planck Yearbook of United Nations Law, volume 11, 2007. Leiden/ Boston: Martinus Nijhoff Publishers, 2007.

Skogly, Sigrun, *Beyond National Borders: States' Human Rights Obligations in International Cooperation*. Antwerpen/ Oxford: Intersentia, 2006.

Singleton, Kenneth, *Investor Flows and the 2008 Boom/Bust in Oil Prices*, Stanford University, 22 July 2011. Available at <http://www.stanford.edu/~kenneths/OilPub.pdf> [accessed 12 July 2012]

Sirinskiene, Agne, ‘The Status of Precautionary Principle - Moving Towards a Rule of Customary Law’, pp. 349–364 in *Jurisprudence*, Volume 4(118), 2009.

Ssenyonjo, Manisuli, ‘Reflections on State Obligations with Respect to Economic, Social and Cultural Rights in International Human Rights Law’, pp. [969]-1012 in *International Journal of Human Rights*, volume 15 (6), August 2011.

Stiglitz, Joseph .E et al., *Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System*. New York: United Nations, 2009. Available at: http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf [accessed 12 July 2012]

Skoufias, Emmanuel; Tiwari, Sailesh; Zaman, Hassan, *Can We Rely on Cash Transfers to Protect Dietary Diversity during Food Crises? Estimates from Indonesia*, Policy Research Working Paper 5548, The World Bank, Poverty Reduction and Economic Management Network, Poverty Reduction and Equity Unit, January 2011.

Strongin, Steve, *Response to “The Food Bubble” by Fredrick Kaufman in Harper’s Magazine, Letter to the Editor*, Goldman Sachs press release, 8 July 2010. Available at: <http://www.goldmansachs.com/media-relations/comments-and-responses/archive/harpers/letter-harpers-content.html> [accessed 12 July 2012].

T

Tang, Ke; Xiong, Wei, *Index Investment and Financialisation of Commodities*, NBER Working Paper 16385. Cambridge, MA: National Bureau of Economic Research, 2010. Available at: <http://www.nber.org/papers/w16385> [accessed 12 July 2012].

Trostle, Ronald, *Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices* (WRS-0801). Washington, D.C.: United

States Department of Agriculture, May 2008. Available at:
http://www1.eere.energy.gov/biomass/pdfs/global_agricultural_supply_and_demand.pdf
f [accessed 12 July 2012]

U

UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant)*, 14 December 1990, E/1991/23, Available at:
<http://www.unhcr.org/refworld/docid/4538838e10.html> [accessed 12 July 2012].

UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12: The Right to Adequate food (Art. 11 of the Covenant)*, 12 May 1999, E/C.12/1999/5, available at: <http://www.unhcr.org/refworld/docid/4538838c11.html> [accessed 12 July 2012].

UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)*, 11 August 2000, E/C.12/2000/4. Available at:
<http://www.unhcr.org/refworld/docid/4538838d0.html> [accessed 12 July 2012].

UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, 20 January 2003, E/C.12/2002/11, Available at: <http://www.unhcr.org/refworld/docid/4538838d11.html> [accessed 13 June 2012].

UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 19: The right to social security (Art. 9 of the Covenant)*, 4 February 2008, E/C.12/GC/19. Available at:
<http://www.unhcr.org/refworld/docid/47b17b5b39c.html> [accessed 12 July 2012].

United Nations Conference on Trade and Development (UNCTAD), *The Global Economic Crisis: Systematic Failures and Multilateral Remedies*. New York/ Geneva: United Nations, 2009(a). Available at: http://unctad.org/en/docs/gds20091_en.pdf [accessed 12 July 2012].

UNCTAD, *Trade and Development Report 2009*. New York/ Geneva: United Nations, 2009(b). Available at: http://unctad.org/en/docs/tdr2009_en.pdf [accessed 12 July 2012].

UNCTAD, *Price Formation in Financialized Commodity Markets: The role of information*. New York/ Geneva: United Nations, June 2011. Available at:
http://unctad.org/en/docs/gds20111_en.pdf [accessed 12 July 2012].

United Nations International Law Commission, *Report on the work of its fifty-eighth session (1 May to 9 June and 3 July to 11 August 2006)*, General Assembly Official Records, Sixty-first Session Supplement No. 10 (A/61/10). New York: United Nations, 2006. Available at: http://untreaty.un.org/ilc/reports/english/a_61_10.pdf [accessed 12 July 2012].

United Nations Sub-Commission on the Promotion and Protection of Human Rights, *The Realization of Economic, Social and Cultural Rights: Report updating the study on the right to food prepared by Mr. Asbjørn Eide*, 29 June 1998, E/CN.4/Sub.2/1998/9. Available at: <http://www.unhcr.org/refworld/docid/3b00efbf8.html> [accessed 12 July 2012].

United Nations Human Rights Committee, Communication no. 52/1979, *Lopez Burgos v. Uruguay*, final views of 29 July 1981 (thirteenth session), UN Doc. CCPR/C/13/D/52/1979.

United Nations Human Rights Committee, *General Comment 31, the Nature of the General Legal Obligation Imposed on State Parties to the Covenant*, (Eightieth session, 2004), UN Doc. CCPR/C/21/Rev.1/Add.13. Available at: <http://www.unhchr.ch/tbs/doc.nsf/0/58f5d4646e861359c1256ff600533f5f?Opendocument> [accessed 12 July 2012].

United Nations Office of the High Commissioner for Human Rights (OHCHR), *Claiming the Millennium Development Goals: A Human Rights Approach*. New York, Geneva: OHCHR, 2008. Available at http://www.ohchr.org/Documents/Publications/Claiming_MDGs_en.pdf [accessed 12 July 2012].

V

Van Banning, Theo R.G., *The Human Right to Property*. Groningen/ Antwerpen/ Oxford: Intersentia, 2001.

Vandenhoe, Wouter, 'Third State Obligations under the ICESCR: A Case Study of EU Sugar Policy', pp. 73–100 in *Nordic Journal of International Law*, Volume 76, 2007.

Vidar, Margret, 'The Interrelationships Between the Right to Food and Other Human Rights', pp. 141-160 in Wenche Barth Eide, and Uwe Kracht (eds.), *Food and Human Rights in Development, Legal and Institutional Dimensions and Selected Topics*, Volume 1. Antwerpen/ Oxford: Intersentia, 2005.

W

Wahl, Peter, *WEED Discussion Paper: Potential Limits of the G20 for Reforming the World Economy Towards Sustainable Development*. Berlin: World Economy, Ecology

& Development Association (WEED), 2011. Available at: http://www2.weed-online.org/uploads/weed_g20_paper.pdf [accessed 12 July 2012].

Wahl, Peter, *Food Speculation as the Main Factor in the Price Bubble in 2008*, Briefing Paper for WEED. Berlin: WEED, 2009.

Welthungerhilfe, *Brennpunkt: Nahrungsmittelpreise*. Bonn: Welthungerhilfe, February 2011. Available in German at: http://www.welthungerhilfe.de/fileadmin/media/pdf/Brennpunkte/Brennpunkt_Nr._17_Nahrungsmittelpreise_2_.pdf [accessed 12 July 2012].

Woods, Jeanne M.; Lewis, Hope, *Human Rights and the Global Marketplace - Economic, Social, and Cultural Dimensions*. Ardsley, NY: Transnational Publishers, 2005.

The World Bank, Development Research Group, Agriculture and Rural Development Team, *Policy Research Working Paper 5633*, April 2011.

The World Bank, *Global Economic Prospects 2009, Commodities at the Crossroads*. Washington D.C.: The International Bank for Reconstruction and Development / The World Bank, 2009. Available at: http://siteresources.worldbank.org/INTGEP2009/Resources/10363_WebPDF-w47.pdf [accessed 12 July 2012].

World Bank, *Global Economic Prospects 2012 – Managing Growth in a Volatile World, Volume 5*. Washington D.C.: The International Bank for Reconstruction and Development / The World Bank, June 2012. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/EXTGBLPROSPECTS/0,,menuPK:615470~pagePK:64218926~piPK:64218953~theSitePK:612501,00.html> [accessed 12 July 2012].

World Bank, *Global Economic Prospects 2012 – Uncertainties and Vulnerabilities, Volume 4*. Washington D.C.: The International Bank for Reconstruction and Development / The World Bank, January 2012. Available at: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1322593305595/8287139-1326374900917/GEP_January_2012a_FullReport_FINAL.pdf [accessed 12 June 2012].

World Development Movement, *MEP Briefing, Tackling Hunger and Protecting Consumers, Curbing Excessive Speculation on Food*. London: WDM, December 2011. Available at: <http://www.wdm.org.uk/sites/default/files/MEP%20briefing%20Nov%202011.pdf> [accessed 12 July 2012].

Wodon, Quentin; Tsimpo, Clarence; Backiny-Yetna, Prospere; Joseph, George; Adoho Franck and Coulombe Harold, *Potential impact of higher food prices on poverty, Policy*

Research Working Paper No. 4745. Washington, D.C.: The World Bank Group, 2008(a).

Wodon, Quentin; Zaman, Hassan, *Higher Food Prices in Sub-Saharan Africa: Poverty Impact and Policy Responses*, Policy Research Working Paper 4738 of the World Bank Human Development Network & Poverty Reduction and Economic Management Network. Washington D.C.: The World Bank Group, October 2008(b).

Wooley, Paul, 'Why Financial Markets are So Inefficient and Exploitative – and a Suggested Remedy', pp. 121-143 in: Adair Turner et al., *The Future of Finance: The LSE Report*. London: London School of Economics and Political Science, 2010.

Z

Ziem, Cornelia, *unpublished expert report commissioned by Foodwatch e.V.*, Berlin September 2011.

Zoellick, Robert B., World Bank Group President, Remarks at the Opening Press Conference, April 14, 2011. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/LIBYAEXTN/0,,print:Y~isCURL:Y~contentMDK:22888974~menuPK:410789~pagePK:2865066~piPK:2865079~theSitePK:410780,00.html> [accessed 12 July 2012].

Radio Broadcast

BBC World Service, *The Documentary: Bubble Trouble*. Available at: http://www.bbc.co.uk/iplayer/episode/p00gq5v2/The_Documentary_Bubble_Trouble/ [accessed 12 July 2012].

Videos

Deutscher Bundestag, *Hearing of the Committee for Food, Agriculture and Consumer Protection on the topic of 'preventing food commodities speculation'*, Berlin, 26 June 2011. Available at: <http://www.bundestag.de/Mediathek/index.jsp?action=search&contentArea=details&offsetStart=6&id=1204473&&instance=m187&categorie=Ausschusssitzungen&mask=search&committee=Ern%C3%A4hrung%2C+Landwirtschaft+und+Verbraucherschutz&&destination=search> [accessed 12 July 2012], Permalink: <http://dbtg.tv/cvid/1204473> [accessed 12 July 2012].

Oxfam Germany, *Food Speculation: A Matter of Life and Death*, 25 April 2012. Available at: <http://www.oxfam.org/en/grow/video/2012/food-speculation-matter-life-and-death> [accessed 12 July 2012].

United Nations Webcast, News and Media, (Part 1) High Level Thematic Debate on 'Addressing Excessive Price Volatility in Food and Related Financial and Commodity Markets' – General Assembly , 11 April 2012, Opening and Panel Discussion 1: *Financial investment in commodity markets: motivations, mechanisms and impacts*. Available at: <http://www.unmultimedia.org/tv/webcast/2012/04/general-assembly-thematic-debate-on-addressing-excessive-price-volatility-in-food-and-related-financial-and-commodity-markets-2.html> [accessed 12 July 2012].

Newspaper articles and internet news

Bauchmüller, Michael; Hagelüken, Alexander, 'Spekulation mit Lebensmitteln - Allianz als Hungermacher', in *Süddeutsche Zeitung*, 9 May 2012. Available at: <http://www.sueddeutsche.de/wirtschaft/spekulation-mit-lebensmitteln-die-hungermacher-1.1352346> [accessed 12 July 2012].

Blas, Javier, 'Exxon chief on supply, demand and \$120 crude', in *Financial Times*, 20 April 2011. Available at: <http://www.ft.com/cms/s/0/1d57d55e-6b14-11e0-9be1-00144feab49a.html#axzz1viLo2NRW> [accessed 12 July 2012].

Blas, Javier, 'Oil seed rise sparks new food price fear', in *Financial Times*, 30 April 2012. Available at: <http://www.ft.com/intl/cms/s/0/df89cc1a-92da-11e1-aa60-00144feab49a.html#axzz1uwg0Ua9c> [accessed 12 July 2012].

Blas, Javier; Terazono, Emiko, 'Food Inflation feared as soya prices soar', in *Financial Times*, 29 April 2012. Available at: <http://www.ft.com/intl/cms/s/0/c5160166-91f2-11e1-867e-00144feab49a.html#axzz1uwg0Ua9c> [accessed 12 July 2012].

Chung, Joanna, 'Soros sounds alarm on oil bubble', in *Financial Times*, 3 June 2008. Available at: <http://www.ft.com/cms/s/0/5dbd0ffe-30ef-11dd-bc93-000077b07658.html#axzz1v8UQVA6a> [12 July 2012].

CNN.com, Riots, *Instability Spread as Food Prices Skyrocket*, 14 April 2008. Available at: http://articles.cnn.com/2008-04-14/world/world.food.crisis_1_food-aid-food-prices-rice-prices?_s=PM:WORLD [accessed 12 July 2012].

Cui, Carolyn; Fitzpatrick, Dan, 'Big Banks Cash In on Commodities', in *Wall Street Journal*, 2 June 2011. Available at: <http://online.wsj.com/article/SB10001424052702304563104576359704074143190.html> [accessed 12 July 2012].

Giles, Chris, 'World Bank chief warns on food threat', in *Financial Times*, 14 April 2011. Available at: <http://www.ft.com/intl/cms/s/0/407afe30-66e6-11e0-8d88-00144feab49a.html#axzz1zI4H0oEn> [accessed 12 July 2012].

Jones, Roger, 'Commodity super-cycle is back in full swing', in *Financial Times*, 1 February 2011. Available at: <http://www.ft.com/intl/cms/s/0/bb0b0ed2-2e07-11e0-a49d-00144feabdc0.html#axzz1uwg0Ua9c> [accessed 12 July 2012].

Robison, Peter; Loder, Asjlyn; Bjerga, Alan, 'Amber Waves of Pain', in *Bloomberg Business Week Magazine*, 22 July 2010. Available at: http://www.businessweek.com/magazine/content/10_31/b4189050970461.htm [accessed 12 July 2012].

Schumann, Harald, *Spekulanten sind die Hungermacher*, in *Der Tagesspiegel*, 23 October 2011. Available at: <http://www.tagesspiegel.de/wirtschaft/rohstoff-spekulanten-die-hungermacher/5442222.html> [accessed 12 July 2012].

Taibbi, Matt, 'The Great American Bubble Machine', in *Rolling Stone*, July 9-23 2009. Available at: http://peakwatch.typepad.com/goldman_taibbi.pdf [accessed 12 July 2012].

Thornton, Emily; Henry, David; Carter, Adrienne, 'Inside Wall Street's Culture of Risk', in *Bloomberg Business Week Magazine*, 11 June 2006. Available at: <http://www.businessweek.com/stories/2006-06-11/inside-wall-streets-culture-of-risk> [accessed 12 July 2012].

Krugman, Paul, 'Speculative nonsense, once again', in *New York Times – The Opinion Pages*, 23 June 2008. Available at: <http://krugman.blogs.nytimes.com/2008/06/23/speculative-nonsense-once-again/> [accessed 12 July 2012].

Legal Documents/ Guidelines/ Declarations

Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries adopted by the International Law Commission, Report of the International Law Commission on the Work of its 53rd session (23 April to 1 June and 2 July to 10 August 2001), UN Doc. A/56/10. Available at: http://untreaty.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf [accessed 12 July 2012].

Council of Europe, *European Convention for the Protection of Human Rights and Fundamental Freedoms*, 4 November 1950, ETS 5. Available at: <http://www.unhcr.org/refworld/docid/3ae6b3b04.html> [accessed 12 July 2012].

Council of Europe, *European Social Charter (Revised)*, 3 May 1996, ETS 163. Available at: <http://www.unhcr.org/refworld/docid/3ae6b3678.html> [accessed 3 July 2012].

Council of Europe, *Protocol 1 to the European Convention for the Protection of Human*

Rights and Fundamental Freedoms, 20 March 1952, ETS 9. Available at: <http://www.unhcr.org/refworld/docid/3ae6b38317.html> [accessed 12 July 2012].

European Commission (EC), Regulation No. 1287/2006 of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards record-keeping obligations for investment firms, transaction reporting, market transparency, admission of financial instruments to trading, and defined terms for the purposes of that Directive. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1287:EN:NOT> [accessed 12 July 2012].

European Union, *Charter of Fundamental Rights of the European Union*, 7 December 2000, Official Journal of the European Communities, 18 December 2000 (2000/C 364/01). Available at: <http://www.unhcr.org/refworld/docid/3ae6b3b70.html> [accessed 12 July 2012].

European Union, *Consolidated version of the Treaty on the Functioning of the European Union*, 13 December 2007, 2008/C 115/01. Available at: <http://www.unhcr.org/refworld/docid/4b17a07e2.html> [accessed 12 July 2012].
European Union, Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006, L396, 30.12.2006, pp. 1–849. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:396:0001:0849:EN:PDF> [accessed 12 July 2012].

FAO, *Rome Declaration on World Food Security*. Rome: FAO, 1996. Available at: <http://www.fao.org/docrep/003/w3613e/w3613e00.htm> [accessed 12 July 2012].

G20, *Cannes Summit Final Declaration*. Available at: <http://www.g20-g8.com/g8-g20/g20/english/for-the-press/news-releases/cannes-summit-final-declaration.1557.html> [accessed 12 July 2012]. For the newly launched International Agricultural Market Information System see also: <http://www.amis-outlook.org/> [accessed 12 July 2012].
International Labour Organization (ILO), *Indigenous and Tribal Peoples Convention, C169*, 27 June 1989, C169. Available at: <http://www.unhcr.org/refworld/docid/3ddb6d514.html> [accessed 8 June 2012].

Loi constitutionnelle n° 2005-205 du 1er mars 2005 relative à la Charte de l'environnement, JORF n°51 du 2 mars 2005 page 3697 texte no. 2. Available at: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000790249&dateTexte=&categorieLien=id> [accessed 12 July 2012].

Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights. Available at: <http://www.icj.org/dwn/database/Maastricht%20ETO%20Principles%20-%20FINAL.pdf> [accessed 12 July 2012].

Maastricht Guidelines on Violations of Economic, Social and Cultural Rights,

Maastricht, January 22-26, 1997. Available at:
https://www1.umn.edu/humanrts/instree/Maastrichtguidelines_.html [accessed 12 July 2012].

Organization of African Unity, *African Charter on Human and Peoples' Rights ("Banjul Charter")*, 27 June 1981, CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982). Available at:
<http://www.unhcr.org/refworld/docid/3ae6b3630.html> [accessed 8 June 2012].

Organization of American States, *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights ("Protocol of San Salvador")*, 16 November 1999, A-52. Available at:
<http://www.unhcr.org/refworld/docid/3ae6b3b90.html> [accessed 8 June 2012].

United Nations, *Charter of the United Nations*, 24 October 1945, 1 UNTS XVI. Available at: <http://www.unhcr.org/refworld/docid/3ae6b3930.html> [accessed 12 July 2012].

United Nations General Assembly, *Convention on the Rights of the Child*, 20 November 1989, United Nations, Treaty Series, vol. 1577. Available at:
<http://www.unhcr.org/refworld/docid/3ae6b38f0.html> [accessed 8 June 2012].

United Nations General Assembly, Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, UN Doc. A/CONF.164/37. Available at:
http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm [accessed 12 July 2012].

United Nations General Assembly, *Convention on the Elimination of All Forms of Discrimination Against Women*, 18 December 1979, United Nations, Treaty Series, vol. 1249. Available at: <http://www.unhcr.org/refworld/docid/3ae6b3970.html> [accessed 8 June 2012].

United Nations General Assembly, *Convention Relating to the Status of Refugees*, 28 July 1951, United Nations, Treaty Series, vol. 189. Available at:
<http://www.unhcr.org/refworld/docid/3be01b964.html> [accessed 8 June 2012].

United Nations General Assembly, *Convention Relating to the Status of Stateless Persons*, 28 September 1954, United Nations, Treaty Series, vol. 360. Available at:
<http://www.unhcr.org/refworld/docid/3ae6b3840.html> [accessed 8 June 2012].

United Nations General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3. Available at: <http://www.unhcr.org/refworld/docid/3ae6b36c0.html> [accessed 3 July 2012].

United Nations General Assembly, *Rio Declaration on Environment and Development*, 12 August 1992, UN Doc. A/CONF.151/26 (Vol. I). Available at: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm/> [accessed 12 July 2012].

United Nations General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III). Available at: <http://www.unhcr.org/refworld/docid/3ae6b3712c.html> [accessed 8 June 2012].

United Nations General Assembly, *United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly*, 20 January 1994, UN Doc. A/RES/48/189. Available at: <http://www.unhcr.org/refworld/docid/3b00f2770.html> [accessed 3 July 2012].

UN General Assembly, *Vienna Declaration and Programme of Action*, 12 July 1993, UN Doc. A/CONF.157/23. Available at: <http://www.unhcr.org/refworld/docid/3ae6b39ec.html> [accessed 12 July 2012].

United Nations Human Rights Council, Seventeenth session, Agenda item 3, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, *Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*, UN Doc. A/HRC/17/31. Available at: <http://www.ohchr.org/documents/issues/business/A.HRC.17.31.pdf> [accessed 12 July 2012].

United Nations Human Rights Council, Human Rights Council Seventeenth session Agenda item 3 Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, *Resolution on human rights and transnational corporations and other business enterprises*, UN Doc. A/HRC/RES/17/4. Available at: <http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/G11/144/71/PDF/G1114471.pdf?OpenElement> [accessed 12 July 2012].

United Nations, *Principles for Responsible Investment, An investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact*. Available at: <http://www.unpri.org/principles/> [accessed 12 July 2012].

United States of America Commodity Exchange Act, chapter 1, paragraph 6a excessive speculation, (15 June 1936). Available at: <http://www.law.cornell.edu/uscode/text/7/6a> [accessed 12 July 2012].

United States Congress, *Dodd-Frank Wall Street Reform and Consumer Protection Act*,

111th Congress of the United States of America, second session, Washington D.C., 5 January 2010. Available at: <http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf> [accessed 12 July 2012].

Judgements

European Union, European Court of Justice, *Judgment of 5 May 1998, The Queen / Ministry of Agriculture, Fisheries and Food and Commissioners of Customs & Excise, ex parte National Farmers' Union and others (C-157/96, ECR 1998 p. I-2211)*.

Available at: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=61996CJ0157 [accessed 12 July 2012].

European Union, Judgments of the Court of First Instance in Cases T-13/99 and T-70/99, *Pfizer Animal Health SA v Council and Alpharma Inc. v Council*. Press release No. 71/02 Available at:

<http://curia.europa.eu/en/actu/communiqués/cp02/aff/cp0271en.htm> [accessed 12 July 2012].

International Court of Justice (ICJ), *Barcelona Traction, Light and Power Company, Limited (Belgium v. Spain); Preliminary Objections*, 24 July 1964, I.C.J. Reports 1964, p. 9, 12. Available at: <http://www.unhcr.org/refworld/docid/402391b04.html> [accessed 12 July 2012].

ICJ, *Case Concerning Military and Paramilitary Activities In and Against Nicaragua (Nicaragua v. United States of America); Merits*, 27 June 1986, I.C.J. Reports 1986, p. 14; General List No. 70. Available at:

<http://www.unhcr.org/refworld/docid/4023a44d2.html> [accessed 12 July 2012].

ICJ, *North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark; Federal Republic of Germany v. Netherlands)*, 20 February 1969, I.C.J. Reports 1969, p.3. Available at: <http://www.unhcr.org/refworld/docid/4023a4c04.html> [accessed 12 July 2012].

ICJ, *Nuclear Tests Case (Australia v. France)*, International Court of Justice (ICJ), 20 December 1974, I.C.J. Reports 1974, p. 253; General List No. 58. Available at: <http://www.unhcr.org/refworld/docid/4023a57c7.html> [accessed 12 July 2012].

Council of Europe (CoE), European Court of Human Rights (ECtHR), case of *Hokkanen v Finland*, judgement of 23 September 1994 (Application No. 19823/92).

CoE, ECtHR, *Case of Ireland v. UK*, judgement of 18 January 1978, (Application no. 5310/71).

CoE, ECtHR, *Ilascu and Others v. Moldova and Russia*, judgement of 8 July 2004

(Application no. 48787/99). Available at:
<http://www.unhcr.org/refworld/docid/414d9df64.html> [accessed 12 July 2012].
CoE, ECtHR, case of *López Ostra v. Spain*, judgement of 9 December 1994, (*Application no. 16798/90*).

CoE, ECtHR, *M.S.S. v. Belgium and Greece*, judgement of 21 January 2011
(Application no. 30696/09). Available at:
<http://www.unhcr.org/refworld/docid/4d39bc7f2.html> [accessed 12 July 2012].

Interviews

Interview with Dr. Flassbeck, Director of the Division on Globalization and Development Strategies, United Nations Conference on Trade and Development, Geneva, 1 May 2012.

Interview with Prof. Dr. Olivier De Schutter, *United Nations Special Rapporteur on the Right to Food*, Brussels, 17 April 2012.

Emails:

Email Egbert Myjer, Judge at the European Court of Human Rights, 4 June 2012.

Email Prof. Dr. Fons Coomans, UNESCO Chair on Human Rights and Peace and Head of the Department of International and European Law, Maastricht University, 22 May 2012.