

The Dynamic of Cocaine and Opium Markets in the European Union

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Abstract

Drug trafficking is not just a social phenomenon, a public health issue or an item of criminology, it is also an important sector of the world economy. It is therefore justified its economic analysis in the present work, despite the imprecision of the data, because it is a product whose processing, transportation and consumption is prohibited in most countries. The present paper analyzes the evolution of the major drug markets worldwide and in the European Union.

Keywords: *drugs, consumption, illegal trade*

JEL Classification: *I39, K42*

Introduction

The production and the unlawful traffic of drugs represent one of the most active ways of manifestation of the transnational organized crime. The profits obtained from this illegal activity made hundreds of criminal groups and bands to appear beside the traditional crime organizations, which put the production and traffic of drugs as their main *** of activity. A concerning point about this situation is that this criminal activities take place under the allowing view of the authorities, thing that determines the criminal organizations to possess thousands of arable land for planting cultures of opiate plants, employees for the entire process of producing drugs, groups for protection, specialists in the chemistry field, informatics, economical-financial department and an entire network of logistics, including mini-submarines and helicopters necessary for their criminal activities.

In 2011, the worldwide production of opium has recovered after a significantly drop in 2010, which was mostly because of a disease of the opium poppy plants from Afghanistan. Recent data about the production of opium poppy shows a rebirth of the opium production and heroin in 2 of the 3 regions in which the opiate is planted like South-West Asia (especially Afghanistan) and South-East Asia (especially the Popular Democratic Republic of Laos and Myanmar). In 2013, the global area of opium poppy cultivation was 296,720 ha which represents the highest

level since 1998. The most important areas of cultivation in Afghanistan were Helmand and Kandahar that are located in the southern and western part of the country¹.

In Africa, Asia and Latin America the money obtained from the illegal selling of drugs are used to buy weapons and for supporting financially the war and the rebellion. At present, the production and the consumption of drugs have encountered a big increase which has come from big profits obtained by very well organized criminal organizations. The old geographical places that are known for providing drug plants have obtained the attention of the drug dealers which made this activity as their main organized activity.

The Opium Market

The Gold Triangle represents a vast area of the Asian continent, which contains regions from Myanmar (Birmanian), Vietnam, Laos and Thailand, summing approximately 70% of the world wide heroin production, an opium derivative. Together with the Gold Semi-moon which includes Afghanistan (it sums approximately 90% of the world wide heroin production) and Pakistan, these countries have become the biggest drugs production in the entire Asia. This region represents the Heaven of opium poppy plants, usually planted and cultivated by poverty-stricken people, whose habit is to burn entire forests in order to use the fields obtained to plant drug plants. After collecting the cultivated fields, the fields are abandoned, and the activity is restarted in another location. This is the only way of survival for the inhabitants, whose incomes are very low and come from selling raw materials for drugs production to the secret drugs dealer's laboratories.

Nowadays, there are 3 different centers of opium production that supply 3 main markets, as follows:

1. Afghanistan is the provider for their neighboring countries, the Middle East, Africa and Europe;
2. Myanmar/Laos is the provider for the neighboring countries, especially China and the Oceania Continent (especially Australia);
3. Latin America (Mexico, Columbia, Peru), the provider for the North American continent (especially USA).

The estimated production of opium raised from 4,700 tons in 2010 up to 7,000 tons in 2011, reaching levels similar to the years before the 2010 decline. In 2013, the potential production is estimated at 6,883 tons. In Afghanistan, the most important supplier and producer, the opium production that was of 3,600 tons in 2010 raised up to 5,800 tons in 2011, but in the next year it went low again to 3,700 tons, which means with 36% lower than in 2011². For 2013, estimates are about 5,500 tons that counts approximately 80% of total opium production³. A significant raise in the production of opium has been recorded in South-East Asia during this period, in Myanmar the production of opium raised from 580 tons in 2010 up to 610 tons in 2011, same as for the Laos Republic in which the production raised from 18 tons in 2010 up to 25 tons in 2011.

¹ UNODC and Ministry of Counter Narcotics of Afghanistan, "Afghanistan opium survey 2013: summary findings", November 2013. Available at www.unodc.org. Accessed on 14.08.2014

² United Nations Office on Drugs and Crime and Afghanistan, Ministry of Counter-Narcotics, *Afghanistan: Opium Survey 2011*. (December 2011). Available at www.unodc.org. Accessed on 07.06.2014

³ United Nations Office on Drugs and Crime, *World Drug Report 2014*, United Nations, June 2014, Vienna. Available at www.unodc.org. Accessed on 02.08.2014

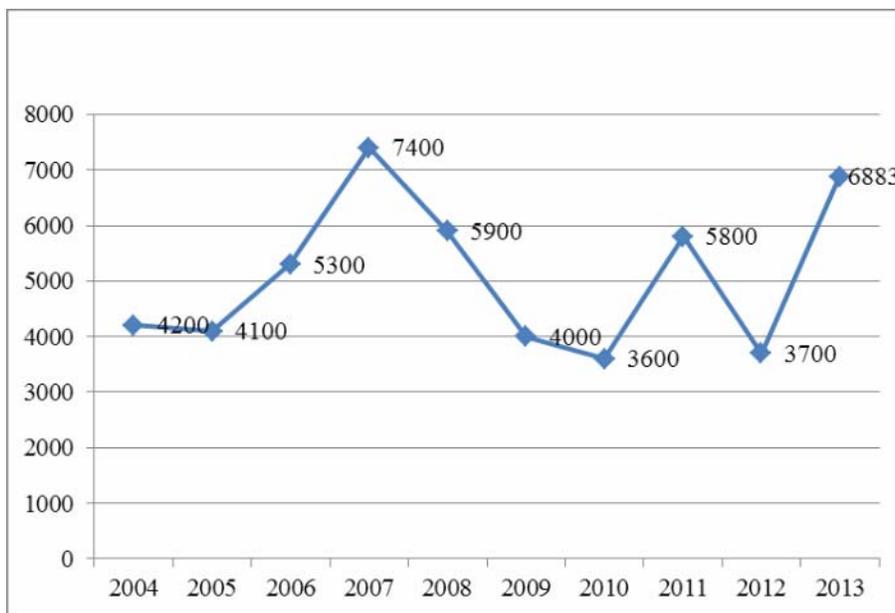


Fig. 1. Opium production (tons)

Source: elaborated based on data from www.unodc.org

From this diagram we can observe that the high level of opium production from the years 2007, 2008 and 2011 was compensated with the ones obtained in 2009, 2010 and 2012. This diagram can explain the quick price rise for dry opium after the middle of 2009 (considered to be the first year with a low production after a long period of years considered to be production records). Therefore we can observe a price rise from 64\$/kg all the way to 169\$/kg after the production failure of 2010. After a certain recovery of production in 2011, the prices remained at a high level.

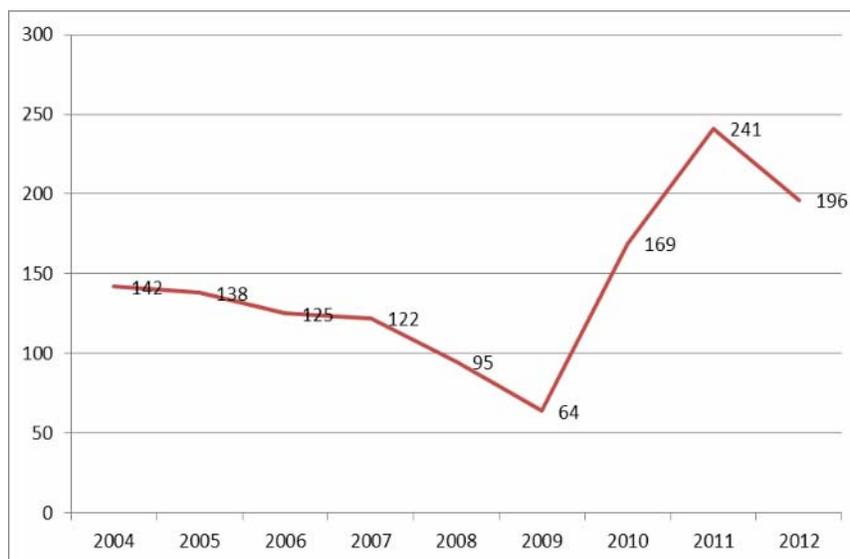


Fig. 2. Price of dry opium (\$/kg)

Source: elaborated based on data from www.unodc.org

Following the way in which the potential total production of opium was of 7,000 tons in 2011, it is estimated that 3,400 tons were consumed or sold as brut opium, while the rest was

transformed into heroin, resulting 467 tons of total potential production of heroin in 2011 which is a raise comparing to 2010 in which the estimated quantity was of 384 tons of the produced heroin.

The total surface cultivated with opium poppy at a global level has grown from 191,000 hectares in 2010, 207,000 hectares in 2011, up to 236.00 hectares in 2012 and as I have mentioned before 296,720 hectares in 2013. Afghanistan remains the main country where the cultivation of opium poppy represents almost 63% of their total production, followed by Laos and Myanmar from South-East Asia with over 20% and the countries from Central and South America (mostly Mexico and Columbia) with almost 7%. There were fluctuations in the production of opium in Afghanistan that affected the opium market from Western and Central Europe mostly because there were some modifications in the structure of the requests of opium on the market, but also because some laws started to be enforced more seriously and new possible ways for treatments started to be taken into account. There are also some changes in the geographical fluxes of the opium that comes from Afghanistan. So, besides the Balkan route which passes through Iran and Turkey towards Europe and the Nordic route that goes through Central Asia and the Russian Federation, there is also the Southern route which goes both through Iran or Pakistan.⁴

Table 1. Net cultivation of opium poppy in the main countries, 2007-2012 (Hectares)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| South-West Asia | | | | | | |
| Afghanistan | 193,000 | 157,000 | 123,000 | 123,000 | 131,000 | 154,000 |
| Pakistan | 1,701 | 1,909 | 1,779 | 1,721 | 362 | 382 |
| Subtotal | 194,701 | 158,909 | 124,779 | 124,721 | 131,362 | 154,382 |
| South-East Asia | | | | | | |
| Lao People's Democratic Republic | 1,500 | 1,600 | 1,900 | 3,000 | 4,100 | 6,800 |
| Myanmar | 27,700 | 28,500 | 31,700 | 38,100 | 43,600 | 51,000 |
| Subtotal | 29,200 | 30,100 | 33,600 | 41,100 | 47,700 | 57,800 |
| Latin America | | | | | | |
| Colombia | 715 | 394 | 356 | 341 | 338 | |
| Mexico ^a | 6,900 | 15,000 | 19,500 | 14,000 | 12,000 | |
| Subtotal | 7,615 | 15,394 | 19,856 | 14,341 | 12,338 | 12,338 |
| Other | | | | | | |
| Other countries ^b | 4,184 | 8,600 | 7,700 | 10,500 | 16,100 | 11,800 |
| TOTAL | 235,700 | 213,003 | 185,935 | 190,662 | 207,500 | 236,320 |

Source: UNODC, *Colombia. Coca cultivation survey 2013*, United Nations, June 2014, Vienna

^a the estimates are not part of the Government official figures

^b Central America and South America, Near and Middle East/South-West Asia, North Africa, Eastern Europe, Central Asia and Trans-Caucasians, East and South-East Asia, South-Eastern Europe, South Asia

With a raise of approximately 7%, the total global quantity of heroin that was seized by the law enforcers remained relatively stable in 2010 (81 tons in 2010 in comparison with 76 tons in 2009), although there were observed some other tendencies on some illegal markets. The seized quantities of heroin grew on the traffic routes that come from South-East Asia and South and Central America (Colombia, Guatemala and Mexico), something that made the heroin request to grow, a growth that was caused by the expansion of heroin production in those regions. Although the total seized quantities raised globally, the same thing cannot be said about the established delivery route of heroin from opium factories in Afghanistan that were the providers

⁴ United Nations Office on Drugs and Crime and Afghanistan, Ministry of Counter-Narcotics, "Afghanistan: opium risk assessment 2013" (April 2013). Available at www.unodc.org. Accessed on 24.06.2014

for the Russian Federation and West and Central Europe, in fact, there was noted a small downfall of the quantity of seized heroin in 2010.

This reflects probably a decrease in the level of production of opium in Afghanistan after 2007 and even the lack of opium observed in 2010.

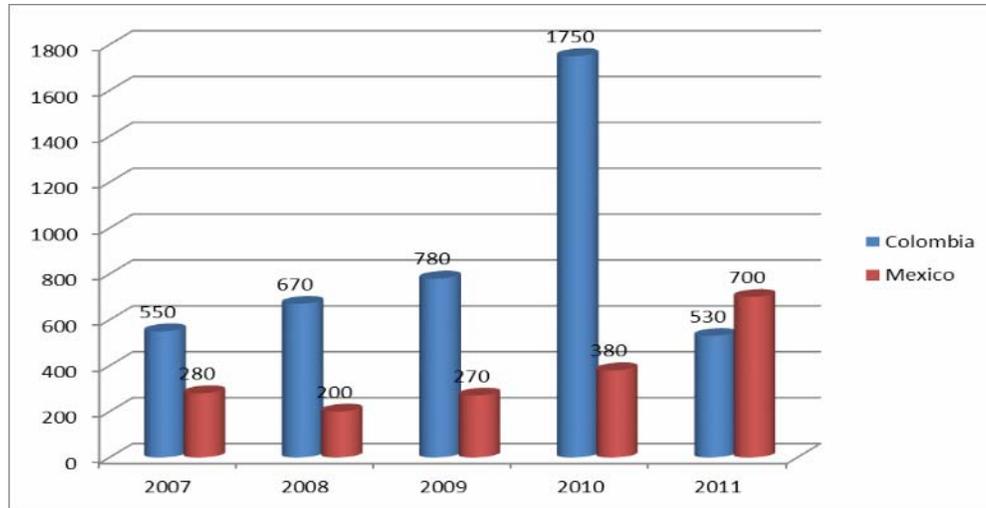


Fig. 3. Seizures in Colombia and Mexico (tons)

Source: elaborated based on data from www.unodc.org

The countries that seized the largest quantities of heroin on global level continue to be Iran with 27 tons (which represents almost 33% of the total seized heroin quantity) and Turkey with 13 tons (representing 16% of the total global seized heroin quantity).

China was one of the Asian countries that sustained for a long time the production of opium, but at the same time with the change of the political and social context, it stopped to offer the favorable conditions for the growth and selling of drugs. The quick decline of opium production in China was one of the reasons why this activity started to move towards Laos, Myanmar, Vietnam or Thailand. Talking about the seized quantity of heroin, it started to slowly decay from 5.8 tons in 2009 to 5.4 tons in 2010, although China continues to be an important market for this kind of drug.

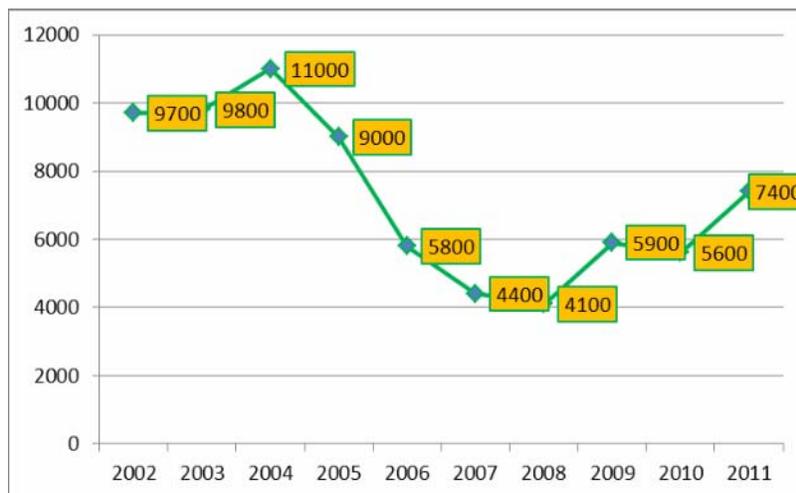


Fig. 4. Heroin seizures in China (tons)

Source: elaborated based on data from www.unodc.org

In recent years, the flow of heroin has declined along the Balkan Route because of the diminished demand from the consumer countries and the strong implementation of law enforcement. The number of users of opiates in Europe declined from 1.6 million to 1.13 million between 2003 and 2012. Therefore, alternatives routes appeared such as the Southern Route that supplies Europe directly from Pakistan or via Africa and the near and Middle East⁵.

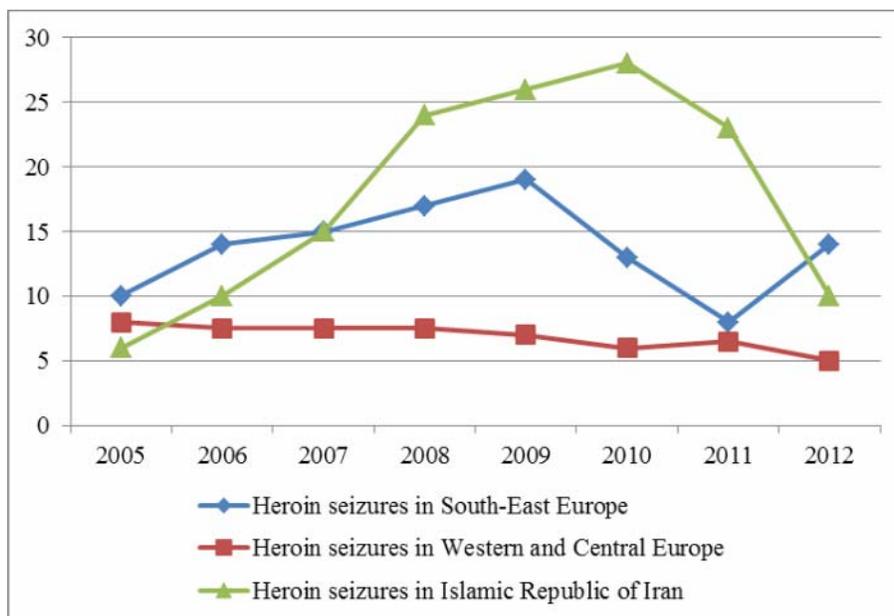


Fig.5. Heroin seizures along the Balkan route (tons)

Source: elaborate based on data from www.unodc.org

The global financial crisis continues to have a significant impact on physical and mental well-being. It was observed that in spite of European recovering there are major reductions in health services and important cuts of drug-related budgets⁶. There are two phenomena that have developed such as the diminishing of services because of small funds and the preference for cheaper drugs instead of the expensive ones⁷. For example, in Milan there was observed a decrease in the heroin and cocaine consumption between 2008 and 2009 (they were more expensive than other drugs); in Romania, it was observed a shift among people who inject drugs – they change heroin with ATS in recent years⁸.

Cocaine Market

The cocaine is the most trafficked drug in the world, after the cannabis plants and resin. Columbia is first provider of cocaine in the world but also one of the main providers of heroin and other substances used in its production. The production of cocaine has developed since 1996 especially in Colombia, a territory on which many drug dealers activate being organized in

⁵ UNODC, *The illicit drug trade through South-Eastern Europe*, March 2014, Vienna. Available at www.unodc.org. Accessed on 18.07.2014

⁶ Claudia Costa Storti and others, "Economic recession, drug use and public health", *International Journal of Drug Policy*, vol. 22, No. 5, (September 2011), pp. 321-325

⁷ Jonathan Caulkins, "The global recession's effect on drug demand — diluted by inertia", *International Journal of Drug Policy*, vol. 22, No.5 (September 2011), pp. 374-375

⁸ Botescu Andrei and others, "HIV/AIDS among injecting drug users in Romania Report of a recent outbreak and initial response policies", EMCDDA, 2012

cartels, one of the most violent being from Medellin - the second largest city in Colombia, named “the capital of flowers” in the 70’s and transformed into some sort of Latino American Beirut after the financial crisis, followed by countless robberies and crimes. It is estimated that around 45 tons of cocaine annually go from Medellin Columbia to the USA and another 10 tons go to Europe, therefore strengthening the opinion that taking this city out of the drug dealing circuit could eventually end the drugs war in that part of the world.

According to the data of the cultivation and production of cocaine and the seized quantity of cocaine, the cocaine market has been in recession in the period 2006-2012, situation reflected especially in North America. On another hand, there was a raise in the consumption of cocaine in regions with large population especially in South America and in a diminished way in Asia and Africa.

The estimative date concerning the cultivated surfaces with cocaine plants in Colombia is of 64,000 hectares in 2011 in comparison with 62,000 hectares in 2010. Almost the entire cocaine culture is concentrated in Colombia, Peru and Bolivia with a total surface of 153,700 hectares 2011 (149,000 hectares in 2010). Bolivia noted a small downfall in the cultivation of cocaine plants because of the Government’s efforts to eradicate this type of activity. Peru, the second biggest cocaine provider in the world as well as provider of substances needed for the production of cocaine, noted a raise of the cultivation surface of 35% between 2006 and 2010. The fight between the Peru State and the aggressive cocaine market has become a problem. It is estimated that nowadays the production of cocaine in Peru has exceeded the one from Colombia, therefore becoming the first provider of illegal drugs to the USA.

Table 2. Global illicit cultivation of coca bush, (Hectares)

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------|----------------|----------------|----------------|----------------|----------------|
| Bolivia | 28,900 | 30,500 | 30,900 | 31,000 | 27,200 |
| Colombia | 99,000 | 81,000 | 73,000 | 62,000 | 64,000 |
| Peru | 53,700 | 56,100 | 59,900 | 61,200 | 64,400 |
| TOTAL | 181,600 | 167,600 | 163,800 | 154,200 | 155,600 |

Source: UNODC, *Colombia. Coca cultivation survey 2013*, United Nations, June 2014, Vienna. Available at: www.unodc.org. Accessed on 28.08.2014

On global level, the consume of cocaine is in general stable, with the number of cocaine consumers being annually estimated in 2010 of being between 13.3 million people to 19.7 million people being 0.3-0.4% of the adult world wide population (people between 15 and 64 years old). North and South America as well as the Central and Western Europe continue to be the biggest markets for cocaine.

The global request for cocaine continues to be dominated, for a long time, by 2 major consumers markets: North America and Western-Central Europe, representing approximately half of the cocaine consumers.

A comparative study made on global scale for the distribution of consumers over different time frames has demonstrated that there are significant raises in Africa, Oceania, Latin America and the Caribbean, Eastern and South- Eastern Europe as well as Asia⁹. These evolutions took place mostly because of the following factors:

- social, psychological and cultural factors;
- spillover effect;
- the geographic distribution of the population;
- the population growth and the consequent increase in the number of consumers.

⁹ UNODC, *World Drug Report 2006*, United Nations, June 2006, Vienna. Available at: www.unodc.org. Accessed on 05.05.2014

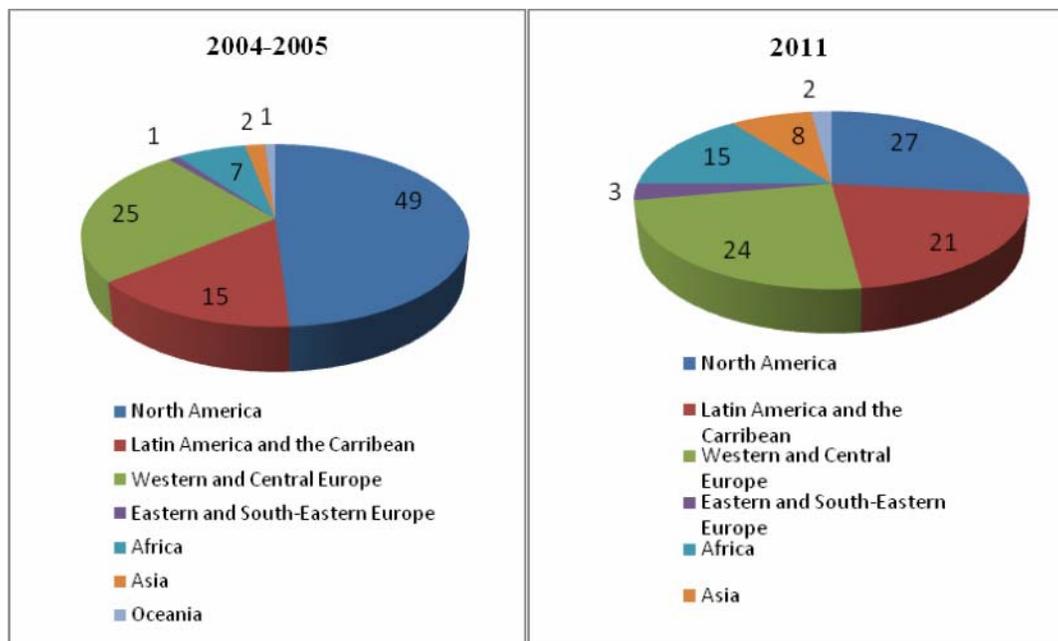


Fig. 5. Distribution of cocaine users worldwide

Source: www.unodc.org

USA registered a lower use of cocaine within the adult population from 3% in 2006 to 2.2% in 2011 which could be related to the 47% decline of cocaine production in Columbia considering that during this period the biggest part of cocaine made for North America was produced in Columbia. In the USA the continued recession of cocaine quantity reflected eventually in the high cocaine price in comparison to 2007 and the previous years. The purity has been adjusted in connection with the selling prices and they significantly highlighted the bulk prices in connection with the recent evolution of the USA market, and the purity prices were adjusted between 2008 and 2010 being obviously bigger than the prices established in 2007 and before 2007, reflecting a stronger availability of the cocaine price in the USA.

The malfunctions of the supplying chain took place because of the new laws and their application and of other evolutions such as violence between cartels, actions that started to reduce the quantity of cocaine that was supposed to arrive at different destinations. If there was a study made on the seized quantity of cocaine it could be observed that the route over the Atlantic has become more important than the route over Pacific. The USA authorities noted bigger captures on their South-West borders between 2008 and 2011 and in Mexico these seized quantities represented 1/5 for 2008-2011 compared to the maximum level of 2007.

In Europe, the cocaine seized has diminished fastly in comparison with its peak period in 2006, the same evolution being noted as well concerning the purity of the cocaine based on data calculated for prices and purity analysing 14 European countries. In the South-East Europe the cocaine consumed were limited although there were noted recent fluctuations. Turkey is known as a consumer country and a transit country for cocaine. Some cocaine traffic routes have the same itinerary as the ones for the heroin traffic.

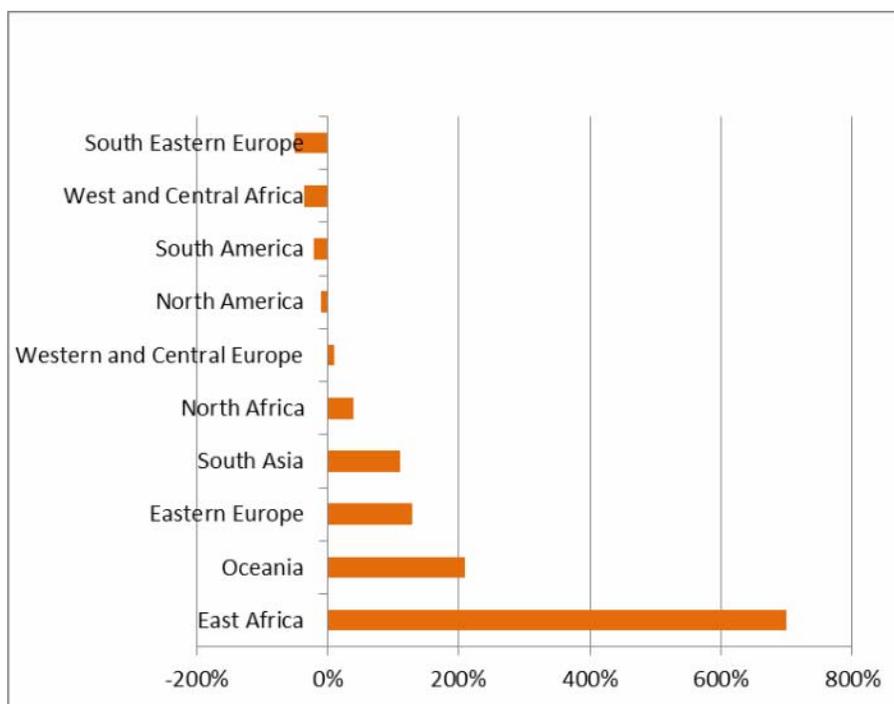


Fig. 6. Cocaine seizures worldwide

Source: elaborated based on data from www.unodc.org

Conclusions

A long-term perspective reveals some stability elements of the based indicators at global level. As noted, the poppy was prevalent in Southeast Asian region with contradictory developments in the early 90s and previously. Thus, there had been a dramatic drop culture in Afghanistan until 2013 when it reached a record level, and in Myanmar had been an increasing trend since 2007. Despite the transient periods due to the environmental influences, the trend of poppy culture between 1990 and 2013 was one of growth. The opiate seizures by the law enforcement authorities have had a strange effect upon the demand drugs, that is the opium production was much stronger than the increase of demand.

Heroin flows have a particular interest due to the expansion of the Balkan route. The routes used by traffickers groups have known variations over time, but nobody knows exactly the reasons why they have changed them. There is a number of shortcomings related to data quality, data sharing and lack of knowledge of the local markets. Therefore the information is inconsistent and leads to erroneous assessments in terms of price and purity of drugs.

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