



**United Nations**  
Office on Drugs and Crime



# Opiates and Methamphetamine Trafficking on the Balkan Route: Drug Flows, Illicit Incomes and Illicit Financial Flows



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# **Opiates and Methamphetamine Trafficking on the Balkan Route:**

**Drug Flows, Illicit Incomes  
and Illicit Financial Flows**



**United Nations**  
Office on Drugs and Crime

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## Key Takeaways



## Key Takeaways

### 1 Significant gross income from illicit drug trafficking

Between 2019 and 2022, the Balkan route – a major corridor for trafficking opiates and, more recently, methamphetamine – generated an estimated total annual illicit gross income ranging from US\$13.9 to US\$21.4 billion. Opiates accounted for about 90 per cent of this total, with methamphetamine representing a smaller but growing share. The aggregated value of these trafficking flows surpasses the gross domestic product (GDP) of several countries along the route, highlighting the significant economic impact of these illegal activities. The data and analysis do not cover the period following the drug ban in Afghanistan that was imposed in 2022 by the Taliban and its impact on drug consumption and trafficking patterns.

### 2 Geographic distribution of trafficking routes

The Balkan route remains a critical pathway for drug trafficking, stretching from Afghanistan through Iran (Islamic Republic of) and Türkiye, and splitting into three main branches, all leading into Europe. Alongside the opiate flow, methamphetamine trafficking is expanding, with manufacturing hotspots identified in Afghanistan, Eastern Europe (Bulgaria, Czechia and Slovakia), Southern Europe (Greece) and Western Europe (Germany and the Kingdom of the Netherlands).

### 3 Opiates and methamphetamine trafficking is concentrated in key hubs

Given their location at the start of the Balkan route, Iran (Islamic Republic of) and Türkiye are the main hotspots for trafficking both drugs. Trafficking through Iran (Islamic Republic of) plays a pivotal role in the opiate trade, accounting for over one-third of total gross income along the Balkan route related to opiates. Other key trafficking hotspots can be found in Belgium and the Netherlands (Kingdom of the). These countries are not only key stops for traffickers but also act as hotspots for distributing opiates and methamphetamine in smaller quantities. Illicit actors in some countries like the Netherlands (Kingdom of the) also contribute to methamphetamine manufacture.



## 4 The impact of proximity and trafficker adaptability on interception rates

Interception rates of illegally traded opiates and methamphetamine along the Balkan route are highest in the proximity of production sources. Iran (Islamic Republic of) and Türkiye intercept the highest percentage of all opiates that cross their territories at 28.2 and 29.3 per cent respectively. Traffickers' adaptability – through tactics such as breaking shipments into smaller quantities, altering routes and employing advanced concealment methods – continue to pose significant challenges to law enforcement, particularly further along the supply chain.

## 5 High profit margins in the drug trade

Trafficking of opiates and methamphetamine can yield substantial profits, with an estimated combined annual illicit net income ranging from US\$10.9 to US\$16.9 billion. These profits represent more than 70 per cent of the total illicit gross income acquired through the trafficking of these two substances after deducting intermediate expenditures, production and purchasing costs. The largest shares of illicit net income are generated at the retail level, where price markups are highest. However, individuals higher up in the supply chain may earn more per person, as fewer people share the profits at the international and wholesale levels.

## 6 Illicit financial flows (IFFs) related to the management of drug trafficking profits are in the order of billions

IFFs are cross border flows of financial or non-financial assets that are illicit in origin, transfer or use. These flows represent the hidden movement of wealth that undermines economic stability and evades lawful oversight. Looking at IFFs generated through the trafficking of opiates and methamphetamine, it is estimated that between a quarter and half of the US\$13.7 billion in illicit net income generated from drug trafficking along the Balkan route is illegally moved across borders, generating potential IFFs related to the management of drug trafficking profits of US\$3.4 billion to US\$6.9 billion annually.

## 7 Link between money laundering and IFFs

There is some evidence that income from drug trafficking is laundered both domestically and abroad through investments in real estate, luxury vehicles and other assets. Shell companies and informal systems like Hawala are frequently used to transfer and launder money, complicating efforts to trace the illicit proceeds. Key trafficking transit points not only facilitate drug movement but also serve as hubs for laundering and redistributing illicit financial resources. Contrary to common assumptions, traditional tax havens may play a minimal role in laundering drug trafficking proceeds. Instead, the limited available data suggests that countries like Luxembourg, the Netherlands (Kingdom of the) and Spain are potential hubs for drug-related IFFs generated along the Balkan route, alongside the United Arab Emirates.



## Implications for Policy and Programming

- Strengthen efforts to understand the flow of assets related to drug trafficking, including identifying the beneficiaries of proceeds of crime, laundering typologies and networks and how the proceeds of crime are moved and stored.
- Create a more robust framework for international cooperation and data sharing between anti-money laundering and tax authorities, bank and non-bank financial institutions and criminal justice agencies among countries along the Balkan route. This will make information more accessible and shareable across borders, improving understanding and facilitating evidence-based responses, both from law enforcement and in policy, to tackling IFFs.
- Enhance Member State capacity to use financial information and intelligence to understand the risks, trends and methods of money laundering and the financing of terrorism related to drug trafficking along the Balkan route.
- Conduct research on and develop typologies of money laundering and the financing of terrorism, focusing on predicate offences related to drug trafficking along the Balkan route. This includes analyzing methods of moving, storing and utilizing illicit funds.
- Develop monitoring systems to track how drug markets are responding to the Taliban's opium ban. This includes investigating if opiate users and traffickers are switching to synthetic drugs, what facilitates such a shift and how IFFs are affected.
- Increase research into the economic impacts of money laundering and financial crimes related to drug trafficking, as well as other socioeconomic impacts, in order to inform an effective, evidence-based policy reform.
- Improve data collection on (synthetic) drugs, focusing on the supply of chemicals used in drug production, prices, purity and usage. This includes improving Member State response to the UNODC Annual Report Questionnaire (ARQ) and Individual Drug Seizures (IDS) data collections.
- Strengthen beneficial ownership transparency to help detect and disrupt financial crimes.
- Support capacity building and technical assistance to support the effective implementation of the Recommendations of the Financial Action Task Force and relevant provisions of the three UN Drug Control Conventions.

## Glossary

- I Illicit financial flows** (IFFs) are financial transfers illicit in origin, transfer, and/or use, involving the exchange of value across country borders.<sup>1,2</sup>
- I IFFs linked to income generation** refer to cross-border transactions carried out in the production of illicit goods and services, or operations that directly generate illicit income for an actor during non-productive illicit activities.
- I IFFs linked to income management** refer to cross-border transactions aimed at using illicit income for investments in legal or illicit financial and non-financial assets, or for consuming legal or illegal goods and services.<sup>3</sup>
- I Illicit gross income**, also known as illicit gross output, refers to the total value of illicit goods or services produced within a given period. This value is determined by multiplying the quantity by the price, which could be the retail price in the domestic market or the export price if the goods are sold internationally.<sup>4</sup>
- I Illicit intermediate expenditure** represents the value of inputs (both licit and illicit) acquired to produce illicit goods and services over a specific period. The value of these inputs is determined by quantity-times-price, using the domestic price for goods bought from residents or the import price for goods bought from non-residents.<sup>5</sup>
- I Illicit net income**, also known as illicit value-added, is the economic outcome of the production process, calculated by subtracting intermediate expenditure from gross output. It represents the net income (income after deducting costs) earned by all actors involved in the illicit activity.<sup>6</sup>
- I Money laundering** is the process of disguising the illegal origin of criminal proceeds, allowing criminals to enjoy their profits without exposing their illicit source. It typically involves three stages: placement (moving funds away from their criminal source), layering (concealing the trail through complex transactions), and integration (reintroducing the laundered funds into the legitimate financial system). However, money laundering methods can vary, with some stages combined or repeated multiple times.<sup>7</sup>
- I South-Eastern Europe** includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia, Türkiye and Kosovo.<sup>8</sup>
- I Western and Central Europe** includes Andorra, Austria, Belgium, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands (Kingdom of the), Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, Faroe Islands, Gibraltar and Holy See.



## Introduction

The 2030 Agenda for Sustainable Development identifies the reduction of illicit financial flows (IFFs) as a priority to build peaceful societies worldwide.<sup>9</sup> Moreover, the Pact for the Future adopted at the Summit of the Future in September 2024 identifies provisions to address IFFs as key actions to ensure international peace and security.<sup>10</sup> IFFs drive corruption, political instability, and weaken the rule of law, while also deepening inequality and hindering economic growth.<sup>11</sup> This creates a vicious cycle where poverty and deprivation fuel drug trafficking, which, in turn, fuels more IFFs. Addressing IFFs is essential to breaking this cycle and reducing both crime and poverty.<sup>12</sup>

Drug trafficking is one of the main crimes contributing to IFFs.<sup>13</sup> Illegal drugs, including opiates (heroin and opium) and methamphetamine, travel across multiple countries before reaching consumer markets. Whenever organized crime groups move drug shipments across borders, IFFs that enrich them are potentially generated. This wealth can then be reinvested in trafficking, used to commit other serious crimes, or laundered to be used in the legal economy. Understanding the geography, dynamics, and size of these monetary flows is crucial to addressing them. This knowledge is key to identifying how and where criminal groups make the most profits.<sup>14</sup> Perhaps more importantly, it can drive the development of effective drug supply reduction strategies and programmatic interventions and help target these in a way that ensures maximum disruption of criminal networks and their transactions.

This research publication follows an initial assessment made in the 2015 UNODC publication *Drug Money: the illicit proceeds of opiates trafficked on the Balkan route*.<sup>15</sup> The new research is an initial step toward assessing the volume and overall value of opiate and methamphetamine trafficking along the Balkan route, which originates in Afghanistan and passes through Iran (Islamic Republic of), Türkiye, and Southeastern Europe to reach Western and Central Europe. Specifically, the report estimates the illicit income generated by opiate and methamphetamine trafficking across the 32 countries along the route, identifies the nature and scope of trafficking flows, and explores laundering schemes.<sup>16</sup> While providing insights into the associated IFFs, the exact magnitude and direction of these flows remain difficult to determine.

A mixture of quantitative and qualitative data retrieved primarily from the Annual Report Questionnaire (ARQ) for 2019-2022 is used by this report.<sup>17</sup> Data on seizures, prices, purities, and prevalence are used to estimate volumes and the monetary value of drugs moving across countries. Qualitative information is used to understand

how criminal organizations manage the profits they earn from opiates and methamphetamine trafficking.

This report also aims to contribute to measuring progress towards Sustainable Development Goal 16.4, which aims to significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets, and combat all forms of organized crime.<sup>18</sup>

The approach to estimating IFFs that is followed in this publication is based on the conceptual framework for the statistical measurement of IFFs, developed by the UNODC and UN Trade and Development (UNCTAD).<sup>19</sup> The Conceptual Framework was approved by the United Nations Statistical Commission in March 2022.

**This report is organized into five chapters:**

- **Chapter 1** lays out the salient features of the Balkan route, detailing the main trafficking flows for opiates and methamphetamine and production points for the latter.
- **Chapter 2** estimates the monetary value generated from trafficking these drugs across the Balkan route and compares it to the gross domestic product (GDPs) of countries along the route to offer a clearer picture of its relevance.
- **Chapter 3** tracks the movement of opiates and methamphetamine along the route, identifying key importers and exporters, and analyses the interception rate (i.e., the proportion of seized drugs relative to the total amount trafficked).
- **Chapter 4** estimates the illicit net incomes from drug trafficking that are available for reinvestment in the legal economy.
- **Chapter 5** explores how and where these profits can be laundered for use in legitimate economic activities thus potentially generating IFFs related to the management of drug trafficking profits.



Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.







## 1. The Balkan route

Since the 1990s, the Balkan route has been the most significant trafficking path for supplying illegal opiates, particularly heroin, from Afghanistan to Western and Central Europe. The route begins in Afghanistan and passes through Iran (Islamic Republic of) and Türkiye. Here, the Balkan route splits into three main branches:<sup>20</sup>

- The **Northern Branch** crosses South-Eastern Europe through Bulgaria and Romania, continuing to Western and Central Europe.
- The **Western Branch** passes through Albania, Bosnia and Herzegovina, Croatia, Kosovo,<sup>21</sup> Montenegro, and Serbia, eventually reaching Western and Central Europe.
- The **Southern Branch** leads into the European Union by moving from Türkiye to Greece and then to Italy.

Aside from Iran (Islamic Republic of), where the consumption of both heroin and opium is widespread,<sup>22</sup> Western and Central Europe are the primary destinations for the heroin produced in Afghanistan and trafficked via the

Balkan route. While opiates are consumed in every country along the route, the vast bulk of consumption is concentrated in a few large countries, including France, Germany, Iran (Islamic Republic of), Italy, Poland and the United Kingdom of Great Britain and Northern Ireland.

In addition to the Balkan route, two other routes are known to supply Afghan opiates to other illicit consumer markets and, to a lesser extent, to Western and Central Europe. The **Northern route** runs through Central Asia to the Russian Federation while the **Southern route**, through Pakistan and Iran (Islamic Republic of), supplies several markets in Africa, Western and Central Europe and South Asia.<sup>23,24</sup>

Methamphetamine is a synthetic drug that can be manufactured entirely from chemicals, unlike opiates which are derived from poppy plants. Consequently, it can be manufactured virtually anywhere. Its manufacture is, in fact, dispersed across several countries, while trafficking

**MAP 1:** Map of the opiate trafficking along the Balkan route showing Northern, Western, and Southern branches



Source: UNODC, Drug Money: the illicit proceeds of opiates trafficked on the Balkan route (United Nations publication, 2015).

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

routes tend to be more regional. Historically, methamphetamine played a minor role in Europe, but recent analyses highlight methamphetamine manufacture, trafficking and consumption as an emerging threat along the countries of the Balkan route.<sup>25</sup>

While law enforcement agencies are discovering illicit laboratories dedicated to methamphetamine manufacture in most countries along the Balkan route, four clusters have emerged:<sup>26</sup>

**I Afghanistan.** The manufacture of methamphetamine in Afghanistan has emerged over recent years, with domestic annual seizures rising rapidly from less than 100 kg in 2019 to nearly 2,700 kg in 2021.<sup>27</sup> Unlike other main manufacturing areas of methamphetamine where chemical precursors are used, traffickers in Afghanistan utilize ephedrine extracted from ephedra plants that grow wild in the mountainous regions of the country as the main precursor. Aside from the documented use of ephedra, precursor chemicals, including cold medications containing ephedrine, may also be used in the manufacture of methamphetamine in Afghanistan. Indeed, chemical precursors offer more efficient and reliable means for methamphetamine manufacture.<sup>28</sup> Record-breaking amounts of methamphetamine, believed to be of Afghan origin, have been seized along the Balkan route, notably in Iran (Islamic Republic of) and Türkiye.<sup>29</sup> This is a rising concern for the entire region, given the existing trafficking flows for opiates in these areas.

**I South-East Europe.** The involvement of illicit actors in the manufacture of methamphetamine in Greece and Bulgaria has seen an uptick in recent years. Traditionally known for other illicit drug activities, criminal actors in these two countries have become increasingly involved in the manufacturing of methamphetamine.<sup>30</sup> While Greece serves primarily as a transit point for methamphetamine destined for Western Europe, domestic manufacture has also emerged.<sup>31</sup> In Bulgaria, rural areas are known to house clandestine laboratories, making it a more prominent manufacturing hub for methamphetamine.<sup>32</sup>

**I North Europe.** There is large-scale illicit methamphetamine manufacturing in the Netherlands (Kingdom of the) and, to a lesser extent, in neighbouring countries (e.g., Germany). These laboratories manufacture methamphetamine using a precursor known as BMK (benzyl methyl ketone), following the same methods used by Mexican cartels. Notably, Mexican and Latin American “cooks” have been identified in laboratories dismantled in the Netherlands (Kingdom of the), suggesting the transfer of knowledge and expertise from Latin America.<sup>33</sup>

**I Central Europe.** There are small-scale laboratories operated by illicit actors in Czechia, Slovakia, and Austria. Although more laboratories have been dismantled in Czechia, Slovakia and, to a lesser extent, Austria than in the Netherlands (Kingdom of the), their manufacturing capacity is smaller compared to those in the Netherlands (Kingdom of the).<sup>34</sup> Operations in this subregion primarily utilize ephedrine and pseudoephedrine as precursors.

The annual value of opiate and methamphetamine trafficking along the Balkan route was between between US\$13.9 and US\$21.4 billion in the years 2019 to 2022. These figures, known as illicit gross income or illicit gross output, represent the estimated total amount of financial resources that traffickers earned from moving these drugs across national borders and that retail sellers or street dealers made from selling them to end consumers within a given year (box 1).

## 2. Illicit gross income from opiates and methamphetamine

Using the preferred estimate of US\$17.5 billion, the overall illicit gross income from the opiates and methamphetamine markets was larger than the 2022 GDP of countries on the route like Afghanistan (US\$14.5 billion) and North Macedonia (US\$13.7 billion).<sup>35</sup> To use another yardstick, the amount generated from these illegal activities exceeded the 2021 education budget of Finland (US\$16.9 billion).<sup>36</sup>

Despite the growing popularity of synthetic drugs, opiates continued to generate the bulk of the revenues for organized criminal groups operating along the Balkan route between 2019 and 2022. During this time period, opiates accounted for almost 90 per cent of the total illicit gross income generated along the route. Opiate trafficking and retailing generated about US\$15.5 billion of revenue, almost eight times what was generated by methamphetamine trafficking which accounted for just under US\$2 billion.



### Box 1: Estimating Illicit gross income: methodology and data

**Illicit gross income** is the total amount of financial resources that traffickers earn from **moving drugs across borders** plus the total amount of financial resources dealers make **selling drugs to end consumers** in a given year. It is a measure of the **total earnings from the entire drug supply chain**, from initial trafficking across borders to final retail sales within a particular year.<sup>a</sup>

A demand-side approach is used to **estimate the value of drugs consumed within a country**. First, it determines the number of opiate and methamphetamine users. It then multiplies this number by the average amount of drugs used by each person per year. Finally, it multiplies the result by the estimated retail price of opiates or methamphetamine in the country. This calculation gives the total monetary value of opiates and methamphetamine consumed in a country. The reliance on prevalence data – which refer to past-year users and are not always updated annually – and the difficulty of differentiating between categories of users (i.e., daily users and infrequent users) are two key limitations of this approach. This report makes a distinction between opiate users in, and out of treatment, and between frequent and infrequent methamphetamine users, to try and address some of these limitations.

To **estimate the financial resources earned from exporting drugs to other countries**, it is necessary to map all the trafficking connections along the Balkan route. This is done by using information from the Individual Drug Seizures dataset of the UNODC Drug Monitoring Platform (DMP), which provides data on the origin, destination, and transit points of drug shipments seized by law enforcement authorities. Seizure data have limitations in assessing the level of drug supply, as they are indicative of supply as much as of law enforcement efforts. However, when analyzed in conjunction with other data, seizure data can be used to more reliably estimate trafficking patterns.

Seizure data help identify countries of origin and destination. Data from the UNODC DMP are triangulated with other quantitative indicators and validated by qualitative information collected during the study. When estimating the illicit gross income, each drug shipment is associated with an economic transaction. In other words, it is assumed that when drugs pass from a country to another, traffickers operating in the first country sell the drug shipments to traffickers operating in the second country. This is a simplification of reality as drug shipments might traverse international borders without any economic transactions occurring.

All estimates in this report are given in **pure-heroin or pure-methamphetamine equivalents**. This means that quantities and prices are calculated as if the drugs were 100 per cent pure heroin or methamphetamine. This standardization allows for comparison between countries with different drug purities.<sup>b</sup>

Annex 2 comprehensively explains the methods used to estimate drug consumption and trafficking values which is based on the methodological annexes of the UNODC report *Drug Money: the illicit proceeds of opiates trafficked on the Balkan route*. It details the process used to obtain estimates and discusses the assumptions behind them.<sup>c</sup>

a UNODC, *Drug Money: The Illicit Proceeds of Opiates Trafficked on the Balkan Route* (United Nation publication, 2015).

b Peter Reuter and Victoria A. Greenfield, "Measuring Global Drug Markets: How Good Are the Numbers and Why Should We Care about Them?," *World Economics* 2, no. 4 (2001): 159–73.

c UNODC, *Drug Money: The Illicit Proceeds of Opiates Trafficked on the Balkan Route*.

There are two main reasons for the much higher gross income for opiates. First, the illicit use of opiates is still relatively high in many countries as compared to methamphetamine use. For example, in Iran (Islamic Republic of), the opiate use rate is 3.31 per cent, compared to 0.40 per cent for methamphetamines.<sup>37</sup> Second, opiates sell for a higher price. On average, the retail price per gram of opiates, adjusted for purity, is about 60 per cent more than that of methamphetamine along the Balkan Route.

However, the situation may soon change. The area dedicated to opium cultivation in Afghanistan plummeted by more than 95 per cent between 2022 and 2023 as a direct result of the Taliban's strict enforcement of their 2022 drug ban and at the time of publication, remains far below 2022 levels despite an estimated 19 per cent year-on-year increase in 2024.<sup>38</sup> For decades, production in Afghanistan dominated global illicit opium market accounting for upwards of 80 per cent of the entire global supply. If the ban continues to be enforced, it is expected to create significant shortages in key markets, such as Europe and Asia. These disruptions could result in profound changes to the demand and supply dynamics of illicit drug markets. While it is too early to fully assess these changes, it is important that future studies closely monitor how the situation unfolds so that policies and programmes can be based on evidence.

In contrast, the methamphetamine market appears to be thriving. Various indicators, particularly seizure data, suggest that methamphetamine availability was higher between 2019 and 2022 than in the previous decade.<sup>39</sup> This is true globally and even more so for the countries along the Balkan route. If these trends continue, synthetic drugs – including, but not limited to, methamphetamine – could potentially pose a greater threat than opiates in the future.

Several countries had significant opiates and methamphetamine markets (figure 1 and figure 2). Populous Western and Central European countries such as France, Germany, Italy, and the United Kingdom of Great Britain and Northern Ireland were among the countries where most illicit gross income for both drugs was generated. Despite differences in overall values, both opiates and methamphetamine are lucrative markets in these countries.

Located at the initial part of the route, the largest share of gross income related to opiate trafficking was generated in Iran (Islamic Republic of) as it is home to the highest number of opiate users in the region and because nearly all opiates on the Balkan route transit through the country.

At an average of US\$5.7 billion per year between 2019 and 2022, opiates trafficked and consumed in Iran (Islamic Republic of) alone accounted for more than a

third (36.9 per cent) of the gross income related to opiate trafficking along the Balkan route. Individuals and groups operating in the Iranian market for illegal opiates generated far higher illicit gross income than that from the trafficking of and dealing in methamphetamine. Nonetheless, gross income generated by the illegal methamphetamine market in Iran (Islamic Republic of) was the fifth largest along the Balkan route, ranging between US\$126 million and US\$188 million annually.

The high value of the opiate market in Iran (Islamic Republic of) is mainly related to three factors: i) its large population, ii) high prevalence of opiate use, and iii) its strategic position along the Balkan route immediately adjacent to Afghanistan – the source of all the opiates trafficked on the route. While not all opiate shipments transiting Iran (Islamic Republic of) involve direct economic transactions with Iranian residents, the significant volume of drugs passing through the country, coupled with its substantial domestic market, generated a sizeable illegal opiate economy.

In some smaller markets, aggregate illicit incomes were high for one class of substances but not for the other. In Denmark, Ireland, Romania and Türkiye, for instance, traffickers and dealers generated high incomes from opiates but not for methamphetamine. On the other hand, in Belgium, the Netherlands (Kingdom of the), Slovakia and Spain, high gross incomes were related to methamphetamine rather than opiates. These differences reflect varying consumption patterns and roles in trafficking routes. For instance, illicit actors in Belgium, the Netherlands (Kingdom of the) and Slovakia play a significant role in the production and distribution of methamphetamine within the region. This explains why a large share of gross incomes related to methamphetamine is generated in these countries. Finally, smaller markets in Southern and Eastern Europe and in the more peripheral parts of the route have smaller illegal economies in absolute terms.

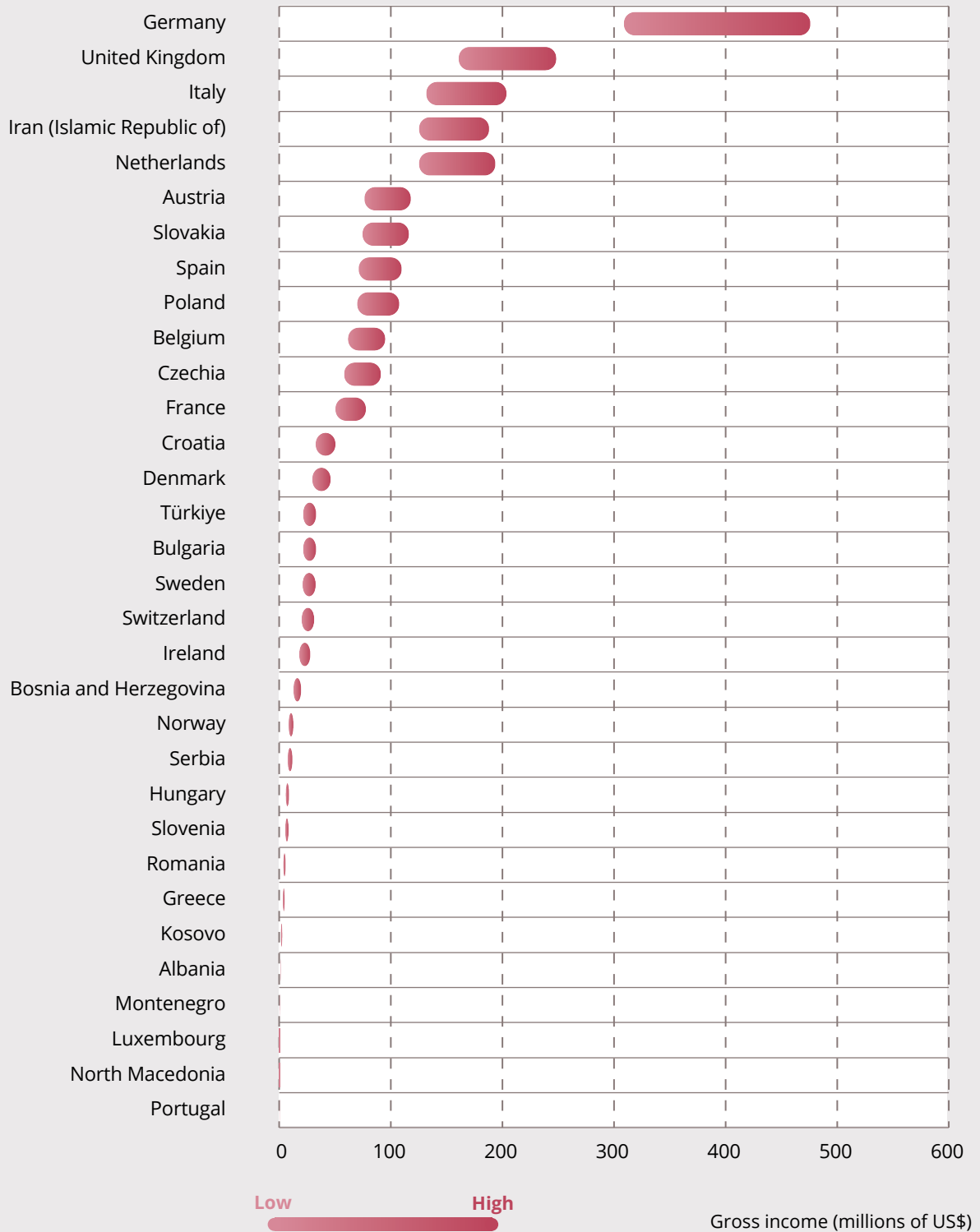
**FIG. 1:** Estimated illicit gross income derived from the opiate market (US\$, 2019-2022 average)



Source: based on UNODC data and population data from the United Nations Department of Economic and Social Affairs.

Note: Illicit gross income is the estimate of the average of the annual total amount of financial resources that traffickers make from moving drugs across borders and dealers selling them to end consumers in the years 2019-2022. Revenues at the transnational level are estimated by calculating the volume of drugs exported and imported between countries and multiplying those amounts by the respective purity-adjusted exchange prices. Revenues at the retail level are estimated by multiplying the total quantity of drugs consumed in a country by the purity-adjusted street price (retail price) of those drugs. The quantity of drugs consumed is derived using demand-side estimates, which factor in data on drug users and their annual consumptions.

**FIG. 2:** Estimated illicit gross income derived from the methamphetamine market (US\$, 2019-2022 average)



Source: based on UNODC data and population data from the United Nations Department of Economic and Social Affairs.

## The value of the markets for opiates and methamphetamine equals public expenditures on public order and safety

As discussed above, the total illicit gross income generated from the illicit opiate and methamphetamine markets along the Balkan route was comparable to the GDP of a small-to-medium-sized country. But how did the gross illicit incomes in each individual country compare against its GDP? And what was the illicit gross income per person in each country? This subsection aims to address these questions. The goal is to compare the size of illicit drug markets to that of the legal economy.

This is not a comprehensive analysis of the overall effects of drugs on a country, which would require considering factors like the reduction in quality-adjusted life years related to drug use and the costs of corruption linked to drug trafficking among other things. Currently, there are no reliable methods to measure all these factors. Instead, this analysis offers a starting point to understand how illicit drug trafficking is impacting the legal economy.

In the period between 2019 to 2022, the highest proportion of illicit gross income to GDP related to opiates and methamphetamine trafficking was found in Albania (0.6 per cent), Iran (Islamic Republic of) (1.8 per cent) and North Macedonia (0.5 per cent) (see map 2). The high share in Iran (Islamic Republic of) was not only due to its geographical location as explained above but also related to a substantial decline in GDP since 2012.<sup>40</sup>

In Bulgaria, Bosnia and Herzegovina, Ireland, Kosovo, Romania and Slovenia illicit gross income ranged between 0.1 per cent and 0.2 per cent of GDP.

In the remaining countries of the Balkan route, the gross incomes derived from illegal markets for opiates and methamphetamine accounted for less than 0.1 per cent of GDP. Among these countries, Türkiye is an example of a country where the relative economic relevance of the markets for opiates and methamphetamine is low, even though it is an important trafficking hotspot for opiates and, to a lesser extent, methamphetamine, moving toward the Balkans. However, given the low prices of exported drugs and Türkiye's large national economy, these illegal markets seemed to be of relatively low economic relevance to the country.

Although the illicit gross income in most Eastern and Southern European countries that are part of the Balkan route was smaller in absolute terms compared to Western and Northern European countries, the relative size in proportion to national GDP was greater. Consequently, the trafficking of opiates and methamphetamine may have a

larger impact on these countries' legal economies than in larger European markets.

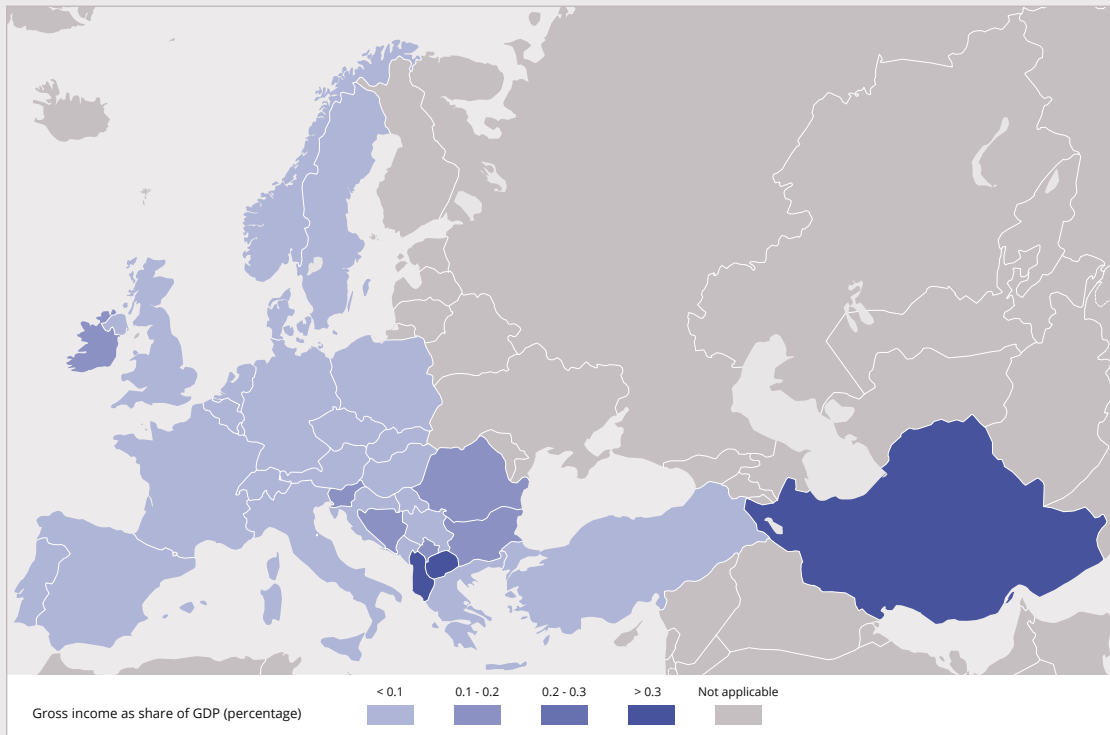
Overall, (despite) the small share of GDP, illicit opiates and methamphetamine economies were found to be significant. To provide perspective, many countries in the European Union allocated a similar percentage, i.e., between 0.1 to 0.2 per cent of their GDP to prisons, fire protection services or wastewater management in 2022.<sup>41</sup>

In addition to the illicit gross income as a share of GDP, map 2 illustrates the estimated illicit gross income per capita from the illicit opiate and methamphetamine markets along the Balkan route. Countries were divided into five gross income brackets, ranging from less than US\$25 to over US\$100 per capita. Notably, several countries in Southern and Western Europe, such as France, Germany and Spain, fall into the lowest income bracket (less than US\$25), indicating that while these countries may have large illicit markets for these drugs, the per capita gross income derived from these illicit activities remained relatively low.

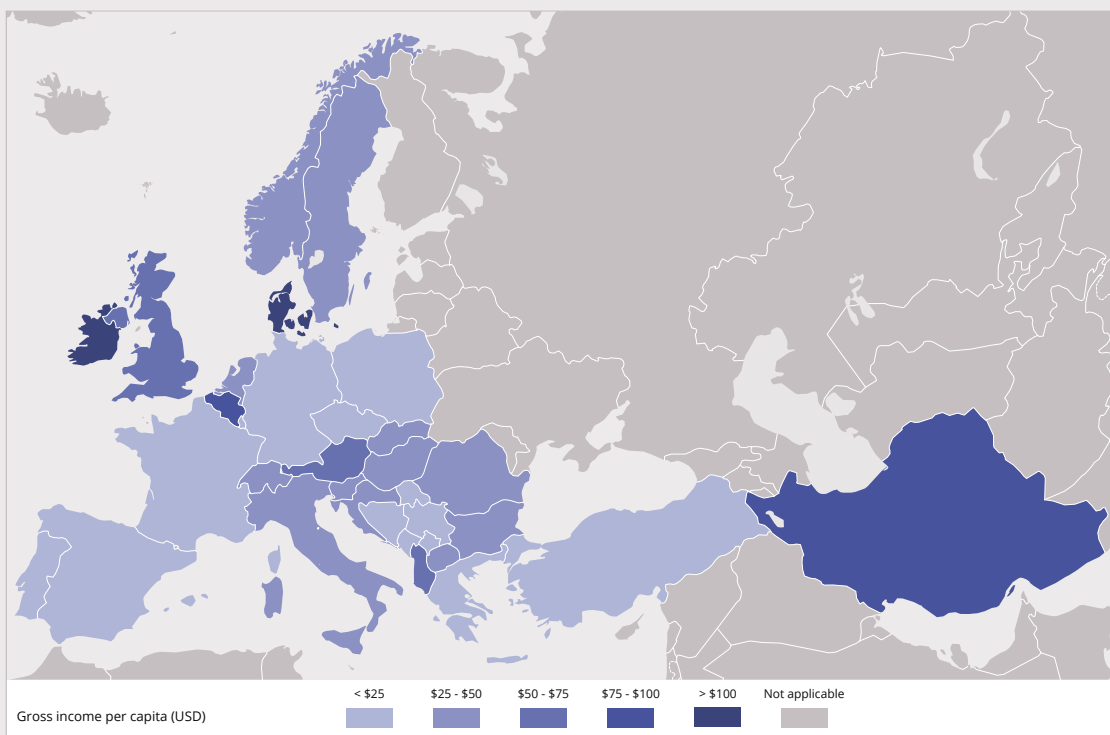
Denmark and Ireland, in contrast, showed higher gross illicit incomes per capita, possibly reflecting greater profitability from such activities. Denmark and Ireland, which register the highest per capita illicit gross incomes, are located on the periphery of the Balkan route. These countries primarily import drugs and have modest exports, meaning the illicit gross income is mainly linked to the selling of drugs to final consumers. In line with the large illicit gross income in comparison to their GDP, Albania, Austria, Belgium, Iran (Islamic Republic of) and the United Kingdom also saw a relatively high illicit gross income per capita.

**MAP 2: Gross income from opiate and methamphetamine markets as share of GDP and per capita**

Gross income as share of GDP



Gross income per capita



Source: Based on UNODC data, GDP (current US\$) from the World Bank Open Data portal (2019-2022 average) and World Population Prospects from the UN Department of Economic and Social Affairs (2019-2022 average).

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.



### 3. Opiate and methamphetamine flows along the Balkan route

In order to estimate the value of the drug economy in the region, it is crucial to understand how opiates and methamphetamine move across countries and reach their intended final users. When drugs are traded between illicit actors from different countries, corresponding financial transactions can accompany the transfer of ownership from one trafficker to another.

Regarding the estimation of the value associated with drug trafficking, the simplest modelling assumption is that the funds used to purchase drugs move in the opposite direction of the drug flow. For example, when opiates move from criminal actors based in Slovenia to those based in Italy, money will flow from illicit actors based in Italy to those in Slovenia. This assumption forms the basis of the income estimates produced in this report. However, the parallelism between drug and financial movements used to estimate financial flows does not always match reality.

The limitations of this approach are: Firstly, reconstructing drug flows based on seizure cases does not distinguish between instances where drug shipments merely transit through a country without a change in ownership and instances where the shipment involves the sale and purchase of drugs. When shipments only pass through a country without a sale, no IFFs occur, as there is no cross-border economic transaction. Secondly, if a sale does take place, payment may be directed to an illicit actor based in a third country rather than the one from which the drugs originated. Thirdly, in the context of the methodology for estimating IFFs, “cross-border” means that a transaction occurs between a resident and a non-resident of a country, regardless of their physical location.<sup>42</sup> In this report, actors are assumed to be residents of the country in which they operate, without further investigation into their actual residency.

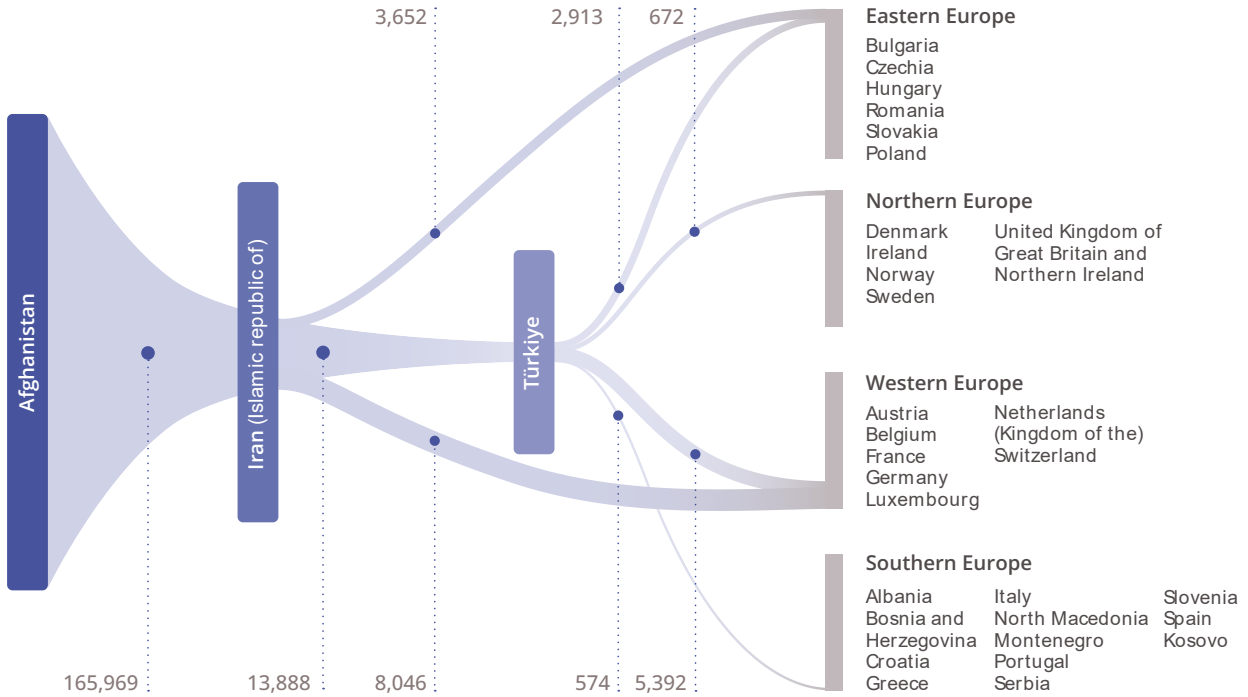
Despite these limitations, mapping out drug trafficking routes, as shown in figure 3 and figure 4, helps in designing better strategies and interventions to combat both the trafficking of drugs and the associated IFFs. In terms of drug volumes, the largest flow of opiates could be found at the start of the Balkan route. Between 2019 and 2022, approximately 166 tons of opiates in pure heroin equivalent per year moved between illicit actors based in Afghanistan to those based in Iran (Islamic Republic of). The illegal flow of opiates from Afghanistan to Iran (Islamic Republic of) alone had a value of approximately US\$900 million. A large portion of these opiates were either seized or distributed within the country to meet

the demand of the internal market. The remainder was trafficked, primarily to illicit actors based in Türkiye, from where it was redistributed across several countries along the Balkan route. Traffickers based in Türkiye function as key actors for redistribution, moving heroin to more than 10 other countries, including Austria, Belgium, Bulgaria, Denmark, France and Germany, depending upon the structure of the transnational trafficking network inferred from seizure and price data. Based on consumption and seizure figures in these countries, it was estimated that approximately 9.6 tons of pure heroin equivalent were transported from traffickers based in Türkiye to these destination markets annually, between 2019 and 2022.

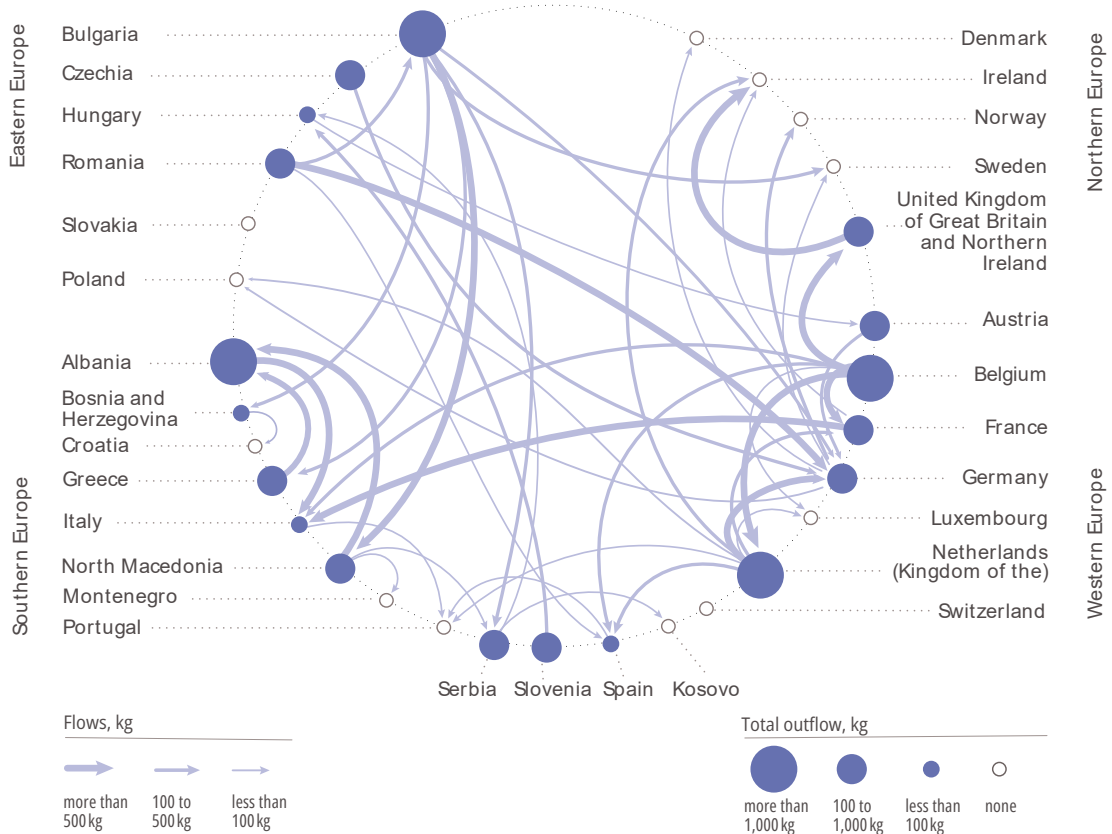
After Türkiye, the countries with the most export connections for trafficking were Belgium, Bulgaria and the Netherlands (Kingdom of the), with traffickers in each of these countries exporting to six or seven other countries within the Balkan route plus other minor flows outside the route. This showed that countries further along the supply chain could also act as transit countries and traffickers based in these countries play a crucial role in the distribution of opiates. For example, a total of 9.8 tons of pure heroin equivalent moved through Belgium, with more than 80 per cent of this amount destined for the United Kingdom of Great Britain and Northern Ireland.

DMP data on seizures and prices suggest that opiates transiting through the Netherlands (Kingdom of the) were primarily destined for France, Germany, Ireland and Spain. Considering the relative significance of seizure cases involving the Netherlands (Kingdom of the), along with estimates of seizures and consumption in these markets, it is estimated that slightly less than 2 tons of opiates, in pure heroin equivalents, transited through the Netherlands (Kingdom of the) annually between 2019 and 2022. If each shipment was accompanied by an economic transaction, IFFs to traffickers based in the Netherlands (Kingdom of the) would amount to approximately US\$132 million.

**FIG. 3A:** Estimated annual illicit opiate trafficking flows on the Balkan route (kilograms of pure illicit opiates, 2019-2022 average)



**FIG. 3B:** Opiate flows on the Balkan route (kilograms of pure illicit opiates, 2019-2022 average)



Source: based on UNODC data.

Note: Estimated annual flows from Balkan route countries to non-Balkan route countries (947 kg) and vice versa (12,319 kg) are not included in this figure.

The analysis of methamphetamine trafficking shows similarities to opiate trafficking. According to the seizure and price data, the primary trafficking connections originated in Afghanistan and moved to Iran (Islamic Republic of) and then on to Türkiye. Based on the model applied in this report, primarily relying on DMP data between 2019 to 2022, traffickers in Afghanistan are estimated to export more than 16 tons of pure methamphetamine to illicit actors in Iran (Islamic Republic of) and another 6.5 tons to illicit actors in countries that are not part of the Balkan route. Traffickers in both Iran (Islamic Republic of) and the non-Balkan route countries might then re-export part of these methamphetamine to countries along the Balkan route (figure 4).

Within Western and Central Europe, illicit actors in Germany and the Netherlands (Kingdom of the) are prominent players in methamphetamine trafficking. Traffickers based in these two countries are producers, importers, and exporters of methamphetamine. More than 1.6 tons of pure methamphetamine were estimated to move from the Netherlands (Kingdom of the) to nine countries along the Balkan route, including Austria, Germany, Italy, Luxembourg, Serbia, Slovenia and Switzerland. Approximately half of these exports, or about 700 kilograms, went to Germany. Smaller volumes of methamphetamine originating in the Netherlands (Kingdom of the) also reached non-Balkan route countries.

Drug flow estimates indicated that traffickers in Germany, in addition to receiving methamphetamine originating in the Netherlands (Kingdom of the), also produce and export methamphetamine. Total estimated exports amounting to almost 2.5 tons of pure methamphetamine equivalent flowed to six other countries of the Balkan route, with most of these shipments supplying illicit markets in Poland (1.1 tons), the United Kingdom of Great Britain and Northern Ireland (0.6 tons) and France (0.4 tons). The reconstruction of trafficking flows suggests that methamphetamine shipments of more than 135 kilograms per year originating in or transiting through Germany were also destined for countries outside the route.

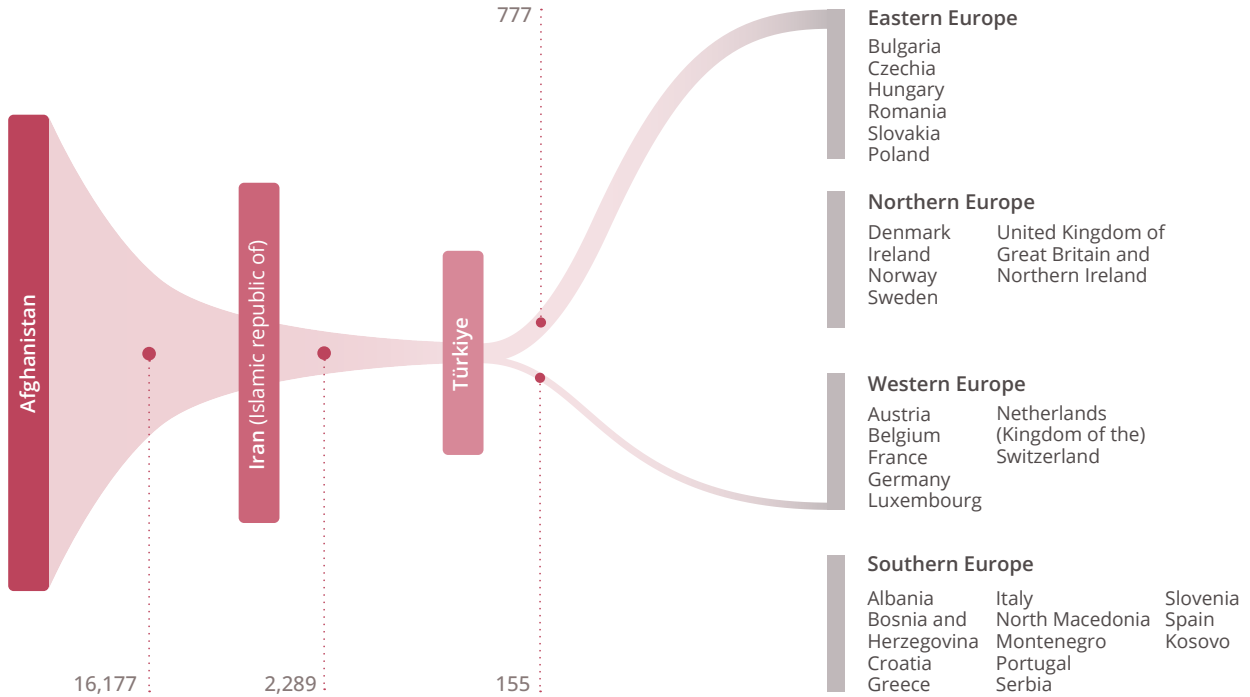
The analysis of drug flows highlights the critical role of specific hubs in the trafficking of both opiates and methamphetamine. For instance, major trafficking routes for both drugs originate in Afghanistan, pass through Iran (Islamic Republic of) and Türkiye, which are geographically located at the beginning of the Balkan route, and disperse across Europe. Seizure and price data further indicate that traffickers in Western and Central European countries such as Belgium, Germany and the Netherlands (Kingdom of the) serve as primary distributors of both opiates and methamphetamine. In addition, this region is a significant hub for methamphetamine manufacture.

Another similarity between opiate and methamphetamine trafficking is the limited number of primary connections between countries, as drug flows are concentrated between specific pairs of countries. Opiate trafficking involves 62 transnational connections between countries on the route, while methamphetamine trafficking is more fragmented with only 37. The 32 countries on the Balkan route, together with Afghanistan, present a total of 1,056 possible connections, of which only about 6 per cent are actively used for opiates trafficking and 3.5 per cent for methamphetamine trafficking. This concentration suggests that traffickers focus on a limited number of specific routes. There could be different reasons for this concentration including lower risks of interdiction, ease of exploitation or close links between trafficking groups across countries. These routes often overlap with major legitimate commercial trade and travel corridors, providing the necessary infrastructure and the opportunity to blend into the large, legal flows of goods and people, offering traffickers anonymity.<sup>43</sup>

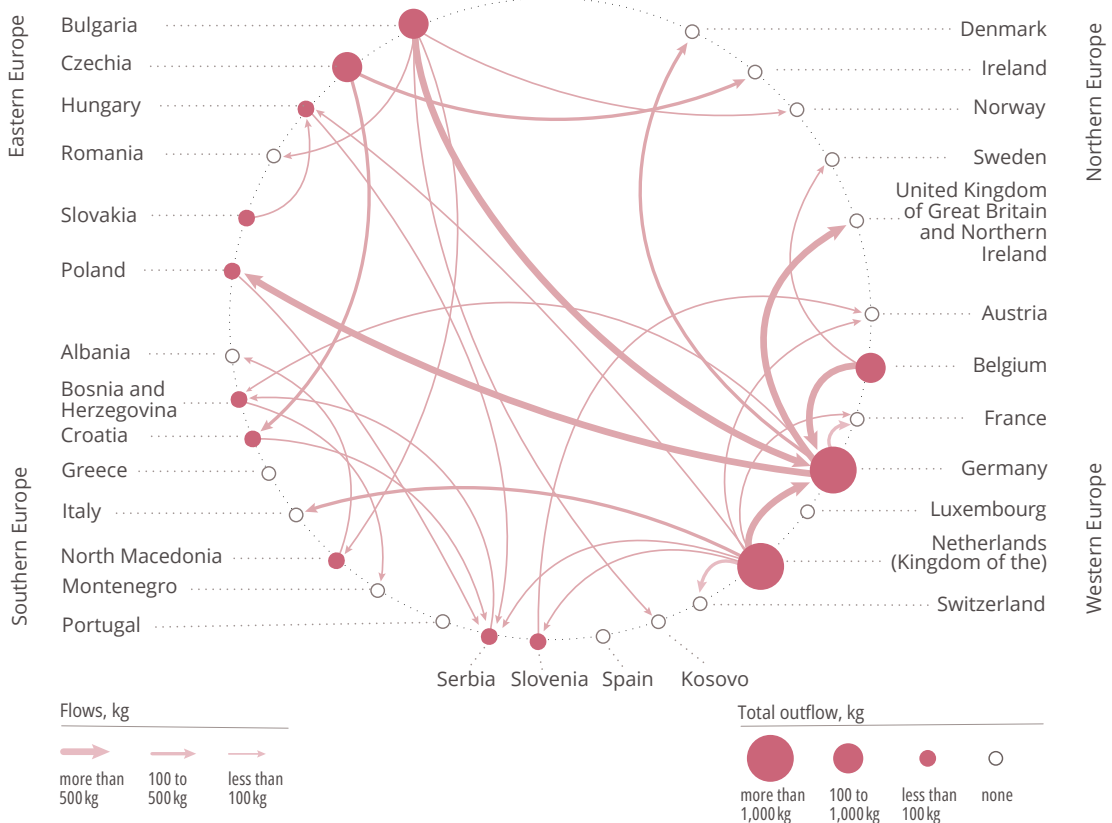
A key difference between the two substances is the role of domestic production. While illicit actors in every country except Afghanistan imports opiates, methamphetamine can also be manufactured locally. This flexibility allows traffickers to either import methamphetamine or manufacture it within their country of operation, which partly explains the significantly fewer trafficking connections for methamphetamine compared to opiates. Since opiates must be imported, the associated trafficking network is more extensive, whereas methamphetamine can be sourced domestically – reducing the need for transnational routes. Another possible contributing factor could be that the methamphetamine market emerged later than the opiate market in regions along the Balkan route. Consequently, while transnational trafficking routes for opiates are well-established, the routes for methamphetamine may not yet be as mature.

Moreover, illicit actors in countries along the Balkan route maintain connections with counterparts in non-Balkan route countries and these links are more common in the case of methamphetamine trafficking according to the available data.<sup>44</sup> These “external” countries – located in Western Asia, Africa and Latin America and the Caribbean – both import and export significant amounts of methamphetamine transiting along the Balkan route.

**FIG. 4A:** Estimated annual methamphetamine trafficking flows on the Balkan route (kilograms of pure methamphetamine, 2019-2022 average)



**FIG. 4B:** Methamphetamine flows on the Balkan route (kilograms of pure methamphetamine, 2019-2022 average)



Source: based on UNODC data.

Note: Note: Estimated annual flows from Balkan route countries to non-Balkan route countries (8,581 kg) and vice versa (8,498) are not included in this figure.

## Interception rates vary by region

It is estimated that most countries along the Balkan route intercept less than 10 per cent of the total amount of opiates and methamphetamine produced and trafficked through the country (map 3 and map 4). Even though more than 50 tons of opiates in pure heroin equivalents and more than 13 tons of pure methamphetamine were seized along the route from Afghanistan to Ireland, a sizeable portion of both drugs remained undetected and supplied destination markets.

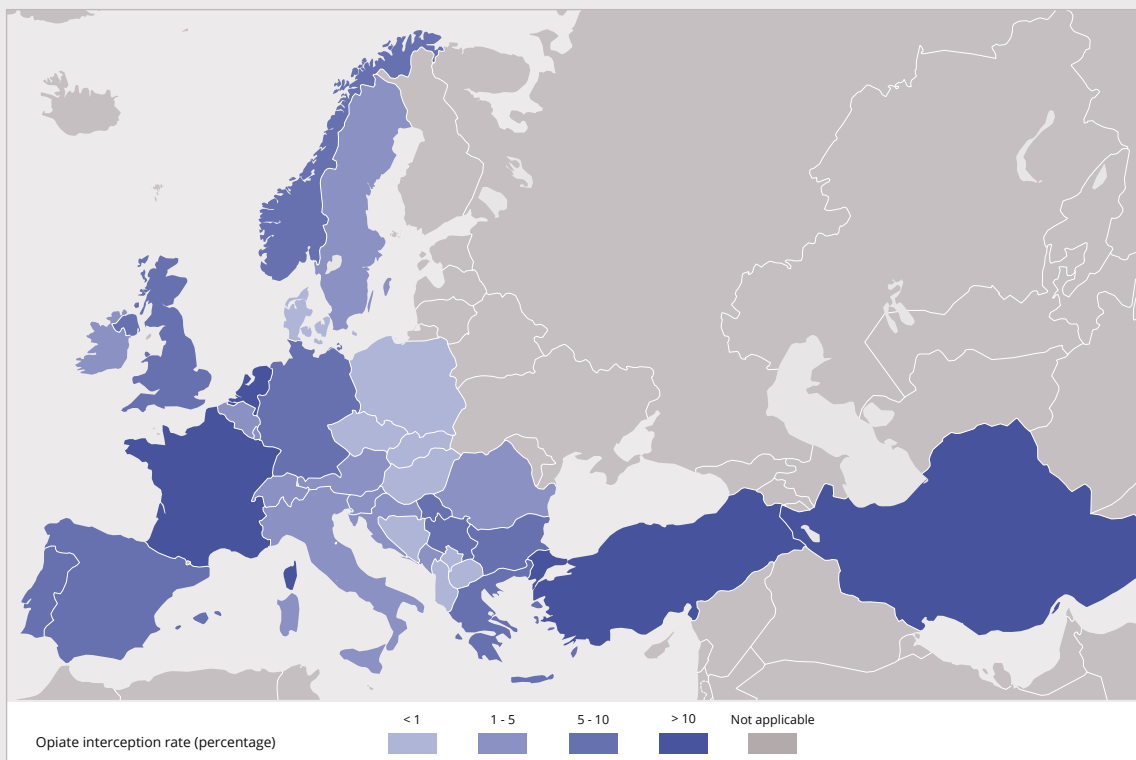
This demonstrates the resilience and adaptability of traffickers. Despite the continuous efforts of law enforcement, criminals quickly respond to interventions by changing trafficking routes, modes of transportation or methods of concealment. These ever-changing tactics make the work of law enforcement even more challenging, as they contend with drug shipments hidden among tons of legal goods crossing borders daily.<sup>45</sup>

As with other illicit substances, such as cocaine,<sup>46</sup> the analysis shows that the interception rate of illicit drugs is often higher closer to the start of the supply chain. For example,

Iran (Islamic Republic of) and Türkiye are estimated to have the highest interception rates for opiates at 28.2 and 29.3 per cent respectively as they are the first countries after Afghanistan on the Balkan Route. Similarly, both Bulgaria and Poland, which are among the countries that report the illicit manufacture of methamphetamine within their borders, have relatively high methamphetamine interception rates. This is likely because countries near production sites can seize larger shipments, which are often transported in bulk from the points of origin. Apart from countries close to illicit production sources, France, Germany and Spain also display relatively high interception rates for both classes of substances.

Interception rates should not be considered a ranking of the performance of law enforcement. Several factors influence this rate, including the geographic location of the country, the prevalence and level of activities of organized criminal groups in the region, the volume of drugs passing through the country, the demand for drugs and the socio-economic conditions.<sup>47</sup> Therefore, the seizure rate is more a reflection of the challenges that local and international law enforcement face in combating international drug trafficking.

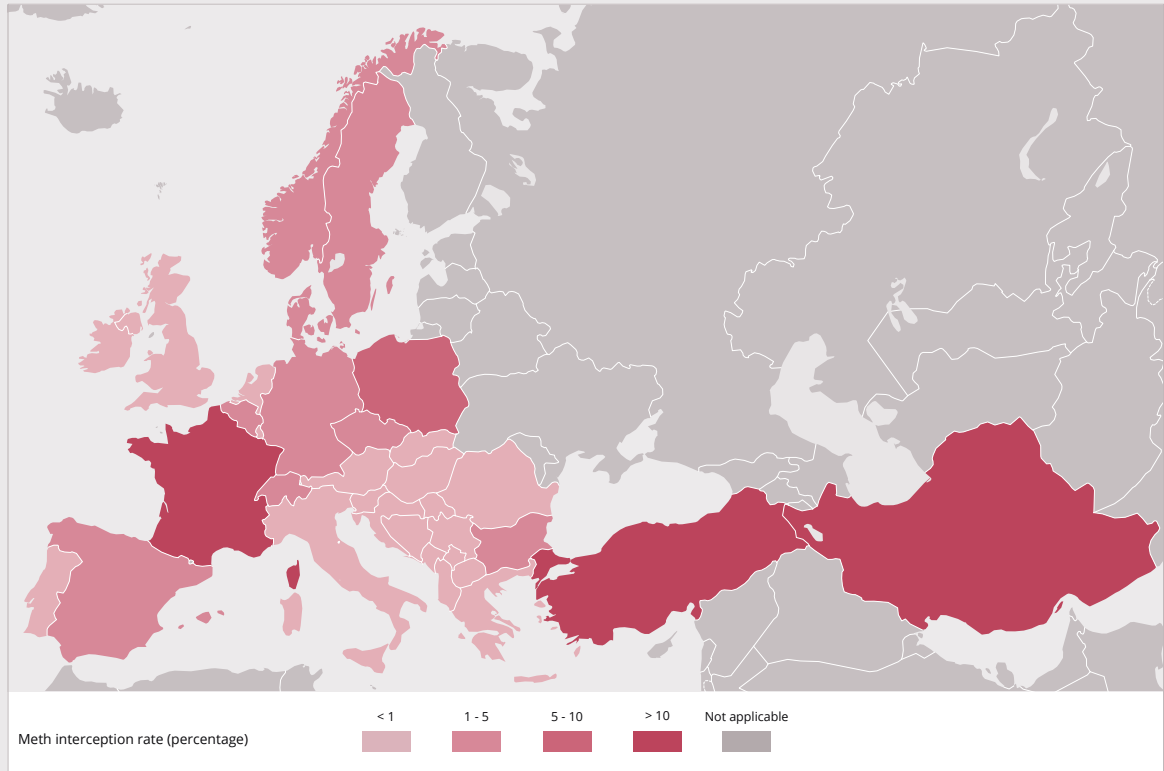
**MAP 3:** Estimated opiate interception rate (Percentage, 2019-2022 average)



Source: based on UNODC data.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

**MAP 4:** Estimated methamphetamine interception rate  
(Percentage, 2019-2022 average)



Source: Based on UNODC data.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

## 4. Illicit net income

This chapter examines the illicit net income available to traffickers for reinvestment or expenditure within the legal economy after accounting for the costs associated with importing or producing illicit drugs. In short, illicit net income provides an estimate of the total financial resources from opiates and methamphetamine trafficking are potentially available for investment in assets or the purchase of goods and services domestically or overseas.

After deducting import and production costs, opiate traffickers were estimated to have retained between US\$9.6 and US\$15 billion annually between 2019-2022, with a midpoint estimate of US\$12.1 billion (figure 5). The total cost for producing and trafficking all the opiates consumed along the Balkan route was estimated at US\$3.3 billion (box 2). Illicit net income from methamphetamine was estimated to range between US\$1.3 billion and US\$1.9 billion, with trafficking and manufacture costs estimated at US\$340 million (figure 6).

### Box 2: Estimating net income from drug trafficking

The net income from drug trafficking includes the turnover from international trade and retail sales of illegal opiates and methamphetamine minus the costs necessary to buy and/or produce them. Therefore, to estimate the net income, costs are subtracted from the estimated gross income.

#### Step 1: Estimating illicit gross income

Illicit gross income is the revenue generated by traffickers from moving drugs across borders and dealers' sales to end consumers within a given year (see box 1).

#### Step 2: Calculating production / manufacture costs

One factor contributing to the final estimate of net income is the cost of producing the drugs. For opiates, the costs of illegal production are based on the "farm-gate" – the price Afghan farmers receive before the products enter the trafficking supply chain – these are based on the UNODC's Afghan Opium Surveys. This unit cost is multiplied by the quantity of opium sent to the Balkan route to estimate total production costs. Similarly, for methamphetamine, the manufacturing cost is estimated using the observed price near the point of manufacture in Afghanistan, as specific data for each producing country are not available.

#### Step 3: Estimating import costs

International traffickers outside of producing countries do not face production costs. Instead, their expenses come from purchasing the illicit drugs they traffic. These costs represent the prices they pay to acquire drugs on the Balkan route. For both illegal opiates and methamphetamine, these costs are calculated by multiplying the weighted average exchange price by the volume of drugs trafficked. These import costs are key to understanding how much traffickers must invest before making a profit.

#### Step 4: Excluded costs and assumptions

While the gross income and basic operational costs such as production and import are directly calculated, other important costs are not itemized. Ancillary expenses, such as those associated with cross-border transportation, security services (e.g., hiring guards), bribery of officials and other logistical costs, are not directly assessed. Instead, it is assumed that these costs are included in the overall illegal economy generated by drug trafficking and dealing, although these margins are not retained by traffickers.

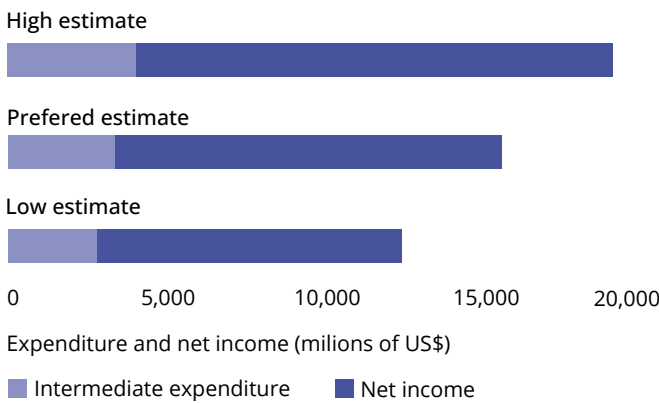
Additionally, the report does not account for drug losses or unsold stockpiles of drugs, as reliable data on these factors are not available. For instance, a certain quantity of drugs may be lost in transit. However, given the high price of illicit opiates, it is assumed that traffickers take particular care in the management of drugs, so that any losses only represent a small share of the total. Therefore, final estimates suffer from only a minor bias even if the model does not estimate losses. Despite this, the final estimate of net income implicitly assumes that traffickers absorb these expenses within their margins, allowing for an approximation of the net income retained after these risks and costs are accounted for.

#### Step 5: Determining illicit net income

The final step in estimating the illicit net income involves subtracting production and trafficking costs from the gross income. This provides an estimate of the profits retained by international traffickers and organized criminal groups after accounting for these expenses.

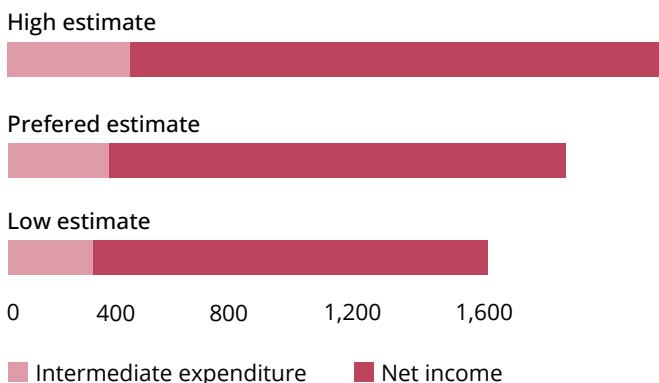
Both opiates and methamphetamine are highly profitable. Profit margins from opiate and methamphetamine trafficking along the Balkan route between 2019 and 2022 exceeded 70 per cent after subtracting production and import costs from the gross income (82 per cent for methamphetamine and 78 per cent for opiates).

**FIG. 5: Intermediate expenditure and net income from opiate trade along the Balkan route (Millions of US\$, 2019-2022 average)**



Source: based on UNODC data.

**FIG. 6: Intermediate expenditure and net income from methamphetamine trade along the Balkan route (Millions of US\$, 2019-2022 average)**



Expenditure and net income (milions of US\$)

Source: based on UNODC data.

### Most net income is earned at the retail level

The distribution of total net income across the supply chain showed that most of the net income was earned at the retail level. Approximately US\$11.4 billion, or more than 80 per cent of the total net income, came from selling opiates and methamphetamine to end consumers (figure 7). This pattern holds true for both types of drugs, even though they have different production points and trafficking routes.

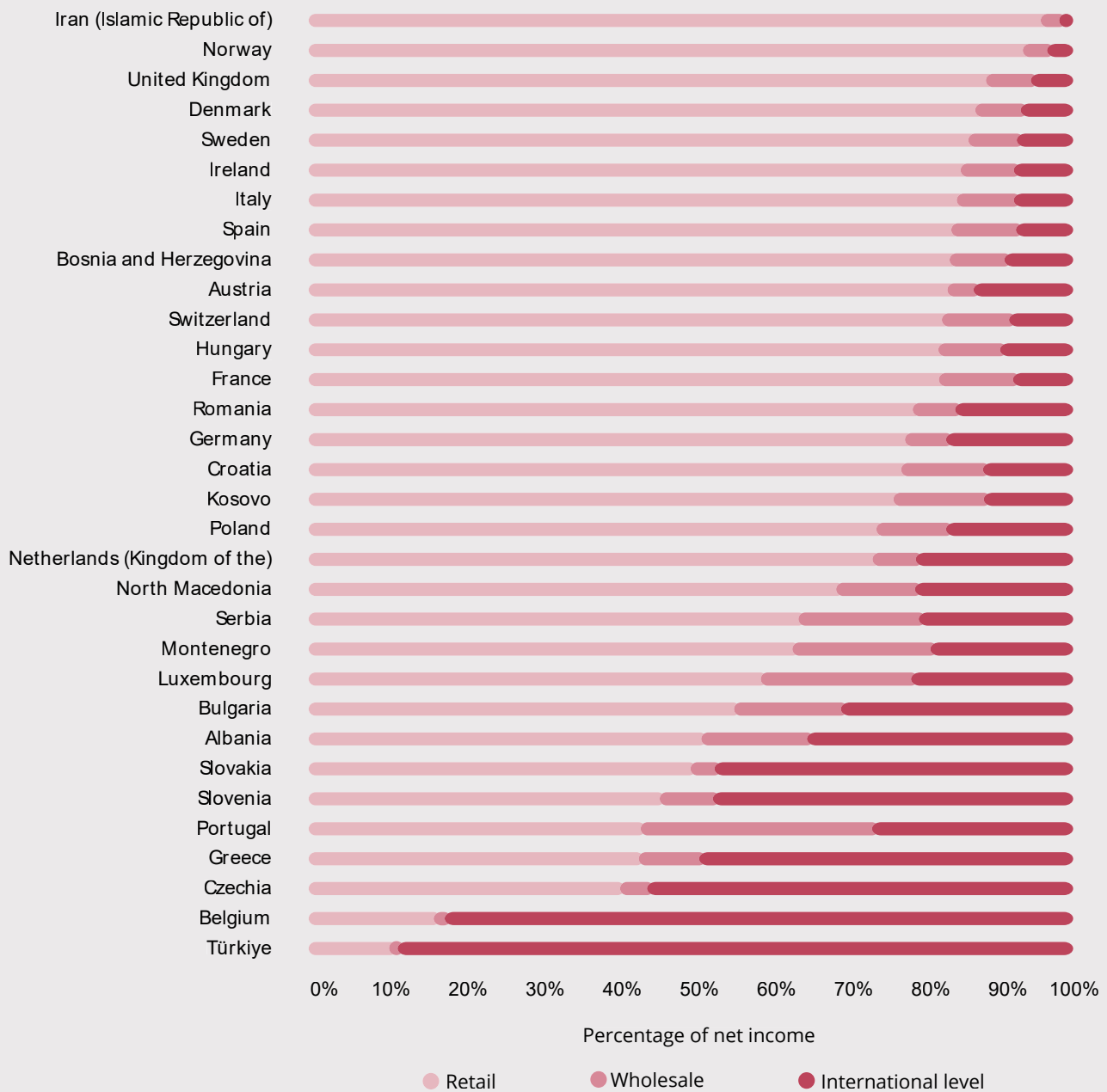
A key reason for this breakdown is the price mark-up of illicit drugs along the supply chain. Drug prices increase as drugs move from production to the end user following the value added along the supply chain and the increase in risk. Therefore, while in most countries the quantities traded at international, wholesale and retail levels are roughly the same, most of the value is generated at the retail stage when reaching the end consumer (box 3).

The net income from international trafficking and wholesale distribution totalled US\$ 2.3 billion (box 3). These two stages of the supply chain comprise a smaller part of total net income compared to retail distribution. Twelve per cent, or US\$1.6 billion, was generated by moving drugs across borders (international level), while six per cent, or US\$700 million, was generated by connecting international distributors to retail sellers (wholesale level).<sup>48</sup> Differences between countries in the net income across the three stages of the supply chain highlight the roles different countries play along the Balkan route. This is especially true for opiates, which until recently had a clear central production point in Afghanistan and near unidirectional trafficking routes leading to Western and Central Europe. Included among the top ten countries with the highest share of net income from international distribution were Albania, Bulgaria, Greece, Serbia, and Slovenia given their central position on the Balkan route.

Conversely, countries with the smallest share of net income from international distribution were mainly final-destination markets located near or at the end of the Balkan route such as Denmark, Norway, and Sweden. An exception to this pattern was Portugal, which is among the top countries for its share of international trafficking, despite not being located at the core of the Balkan route. Portugal is characterized by low prices of opiates at the retail level, which are not matched by equally low prices at the wholesale and international-trafficking level, meaning that the latter represent a large share of total net income generated in the country.



**FIG. 7:** Breakdown of total net income from opiate and methamphetamine trafficking along the Balkan route (Percentage, 2019-2022 average)



Source: based on UNODC data.

Note: This graph illustrates the breakdown of total net income across different levels of the drug trafficking supply chain: international trafficking, wholesale trafficking and retail distribution (see box 3):

- At the international trafficking level, net income is calculated by subtracting the cost of purchasing drugs upstream in the transnational supply chain from the gross income earned through cross border drug sales or domestic sales to wholesale distributors. This is adjusted for purity levels and seizure volumes.
- For wholesale trafficking, net income is calculated by subtracting the cost of purchasing from international traffickers from the gross income earned by distributing drugs to retailers, while accounting for purity-adjusted quantities seized by law enforcement.
- At the retail distribution level, net income is calculated by subtracting the wholesale purchase cost from the gross income generated by selling drugs to end consumers, using purity-adjusted street prices to estimate the value of retail sales.

### Box 3: Subdivision of the net income along the transnational and national supply chains

In the context of the illicit drug trade, the terms international trafficking, wholesale trafficking and retail distribution refer to the different stages used in the modelling of drug supply chains, from production to final consumer. This box offers a breakdown of how each term is used in this report and how values are estimated.

#### **International trafficking**

International trafficking refers to the large-scale smuggling of drugs across national borders. This stage typically involves transporting drugs from production areas (such as Afghanistan for opiates) to other countries where the drugs are distributed, sold or further trafficked along the supply chain.

The value of international trafficking is estimated by determining the quantity of drugs transported between two countries and multiplying it by the 'exchange' purity-adjusted price of drugs between those two countries. This price reflects the typical wholesale or bulk prices in the two countries. Then, to obtain the net income from international trafficking, the costs of purchase of the trafficked drugs are subtracted from the gross income made from selling them to other transnational traffickers along the supply chain or to national wholesalers that distribute the drug within a country. The purchasing costs consider both the volumes of drugs that are transferred to other traffickers operating in the illegal market and the volumes seized by law enforcement agencies.<sup>a</sup>

#### **Wholesale trafficking**

Wholesale trafficking refers to the domestic distribution of drugs within a country after they enter through international trafficking routes or, in the case of methamphetamine, are domestically manufactured. This involves handling large quantities and selling them to mid-level distributors or organized criminal groups who then distribute the drugs further to the end consumer. Differently from international trafficking, individuals and groups who conduct wholesale trafficking do not trade drugs across country borders.

Wholesale value is estimated by multiplying the quantity of drugs distributed domestically by the purity adjusted wholesale price in that country. This is the price at which drugs are sold in bulk (typically kilograms) within countries to other traffickers or distributors. Wholesale prices vary by country and are influenced by proximity to source countries, local law enforcement operations and market demand. The quantity of drugs distributed domestically is estimated using a demand-side approach, which takes into consideration purity-adjusted estimates of consumptions and seizures at both the retail and national-distribution level.<sup>b</sup>

The net income at the wholesale level is calculated by subtracting the cost of purchasing drugs from international traffickers from the gross income earned by selling to retailers. Additionally, when estimating net income, the costs consider the purity-adjusted quantity of drugs seized at wholesale level, using estimates derived from information on seizure volumes and purity across the supply chain.

#### **Retail distribution**

Retail distribution is the final phase where drugs are sold in smaller quantities to end consumers. The net income at retail level is estimated by subtracting the costs of purchasing drugs at the wholesale level from the gross income generated by the sale of drugs at the retail level. The value of retail distribution is estimated by calculating the total quantity of drugs sold to consumers and multiplying it by the street price (retail price). Estimates of annual consumption per user help gauge the size of the retail market and street prices are adjusted for purity.<sup>c</sup>

a UNODC, *Drug Money: The Illicit Proceeds of Opiates Trafficked on the Balkan Route* (United Nations Publication, 2015).

b Ibid.

c Ibid.; Jonathan P. Caulkins and Peter H. Reuter, "How Drug Enforcement Affects Drug Prices," *Crime and Justice* 39, no. 1 (2010): 213–71.

### Box 4: Opiates and methamphetamine trafficking along the supply chain: people involved and price mark-ups

As in other markets, drugs move from producers to end users, while financial resources move in the opposite direction. However, drug trafficking also has its specificities. First, not all drugs reach users because some drugs will be seized by law enforcement agencies. Second, only a small portion of these financial resources reach the producers. Most of the financial resources spent on drugs goes to retail sellers.

Even though most of the financial resources generated from selling opiates and methamphetamine are made at the retail level, retail dealers are not necessarily the ones that profit the most at the individual level. There are more people involved in selling drugs at the retail level than at any other stage of the supply chain. This means that while there are more financial resources overall at the retail level, an individual trafficker might earn more upstream in the supply chain.

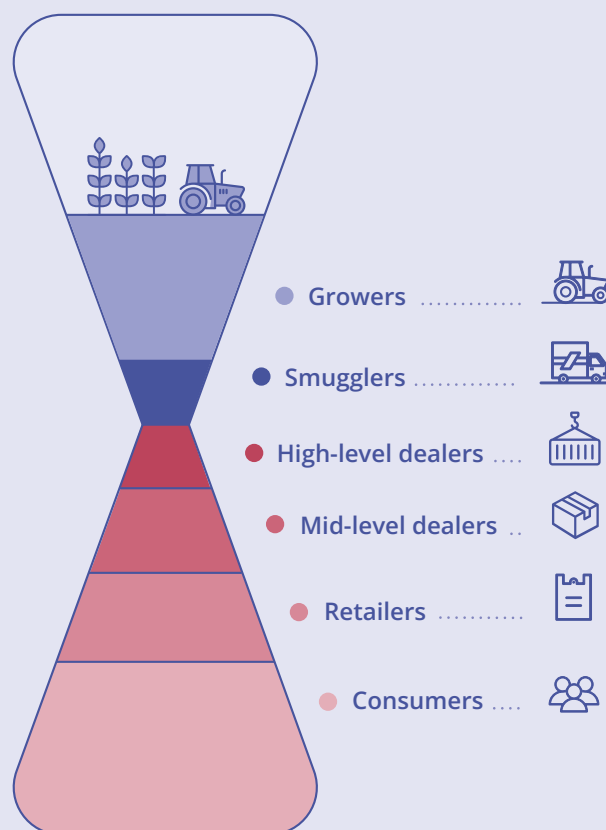
The number of actors operating in the different stages of the supply chain also influences the possible generation of IFFs when drug profits are moved abroad. All else being equal, lower amounts of IFFs are likely to emerge from the dealing stage compared to the transnational trafficking stage because a greater number of actors participate in drug dealing compared to transnational trafficking. When assessing IFFs related to management of drug profits, it is not the total margin generated in each stage that counts but rather the margin made by individual actors or groups.

Figure 8 shows how illicit drug trafficking is organized, resembling a truncated hourglass. The width of each layer represents the number of people involved at that stage. At the top, many farmers grow small amounts of crops in producing countries. The UNODC has estimated that between 325,000 and 600,000 households grow opium poppies, mostly in Afghanistan.<sup>a</sup> In contrast, there are fewer people who refine the raw opium into heroin, and even fewer smugglers and top-level importers in consumer countries.<sup>b</sup> As depicted in the bottom half of the hourglass, the number of wholesale sellers increases, and there are many retailers.

This model applies to most drugs but can vary depending on the substance. For instance, heroin may change hands many times from its production in Afghanistan to its sale in Europe. Methamphetamine, on the other hand, might pass through fewer hands since it is often manufactured closer to the end users. Concurrently, there are usually more retail dealers for drugs like methamphetamine because they are often sold within informal networks.

Prices also rise as drugs move from production to retail. This trend is consistent across all substances and countries, but is particularly pronounced for opiates in Northern and Western Europe. This is partly because this region is farther away from production sites like Afghanistan, which means that opiates go through more middlemen, each adding a markup. Additionally, prices tend to be higher in countries with a higher per capita GDP.<sup>c</sup>

FIG. 8: Hourglass model showing the proportion of people involved at each stage of the supply chain



Source: Thomas F. Babor and others, *Drug Policy and the Public Good* (Oxford Academic, 2009).

- a UNODC, *World Drug Report 2020* (United Nations publication, 2020)
- b *Ibid.*
- c Letizia Paoli, Victoria A. Greenfield, and Peter Reuter, *The World Heroin Market: Can Supply Be Cut?* (New York: Oxford University Press, 2009)

## 5. Illicit financial flows related to income management

This chapter outlines the characteristics of IFFs related to the management of illicit income generated from participation in the illegal markets for opiates and methamphetamine, often referred to as IFFs associated with income management.<sup>49</sup> IFFs from income management are generated when illicit income crosses borders to invest in financial and non-financial assets or to consume goods and services.<sup>50</sup> While this report does not provide country-level estimates, it offers insights into the share of income that is moved abroad and the share that is laundered or spent domestically (box 5). It also identifies

countries that often act as transit points or destinations for IFFs linked to illegal opiates and methamphetamine. Finally, the report examines the methods used to transfer these funds and the sectors where the money is likely to be invested. This analysis draws on information provided by Member States in the ARQ as well as from case studies, national law enforcement agency reports and previous research.<sup>51</sup>



### Box 5: The complexities of estimating IFFs from income management

IFFs from income management include any cross-border flows aimed at investing or consuming income from the transnational drug trade. Estimating IFFs related to income management in a country is challenging. The difficulty arises because of two principal reasons. First, it is difficult to determine how much financial resources are invested in the legal economy compared to how much is reinvested in criminal markets. IFFs often come from illegal activities such as drug production and trafficking. While the illicit market for drugs can be highly profitable, some of the financial resources are used to buy more drugs and maintain operations. Little evidence exists to understand the decision-making and investment strategies of trafficking organizations, making it difficult to determine how much is re-invested in illegal activities and how much is laundered.<sup>a</sup>

Second, it is difficult to determine how much financial resources generated from drug trafficking stay in a country compared to how much is invested abroad. The flow of financial resources can be different from the flow of drugs and traffickers have many options for investing their illicit profits. The size and scope of income management activities related to inward IFFs depends on factors such as a country's attractiveness for money laundering, differences in tax rates and regulations governing financial flows between countries, the likelihood of nationals abroad sending home illicit income and the internal structure of multinational companies.<sup>b</sup> Additionally, those looking to invest or spend their illegal income abroad have a variety of options, including complex financial products, real estate and luxury products. The methods for transferring funds abroad are equally varied, from simple cash smuggling

to setting up shell companies and using crypto assets.<sup>c</sup> All these factors combined make estimating IFFs from income management accurately, highly challenging.

All these factors are theoretically reasonable, however, empirical analyses of their intricate interconnections and estimates to better understand their actual roles are rare in general and almost absent when focusing on any specific illegal activity and market, such as those for the illegal production and trafficking of opiates and methamphetamine. This is due to a substantial lack of data on these matters. For both law enforcement agencies and other entities (i.e., businesses and organizations handling financial transactions and required to comply with anti-money laundering and counter-terrorist financing regulations), it is hard to identify and track IFFs related to specific drug businesses as these transactions are easy to hide among millions of other legitimate transactions that need to occur rapidly and smoothly to keep the global economy moving.

a Alberto Aziani, *Illicit Financial Flows: An Innovative Approach to Estimation* (Cham: Springer International Publishing, 2018).

b Matthew Collin, *Illicit Financial Flows: Concepts, Measurement, and Evidence* (Washington, DC: World Bank Group); Sahar Hameiri, Lee Jones and Adam Sandor, "Security Governance and the Politics of State Transformation," *Journal of Global Security Studies* 3, no. 4 (2018): 463-482; Emilia A. Isolauri and Irfan Ameer, "Money laundering as a transnational business phenomenon: a systematic review and future agenda," *Critical Perspectives on International Business* 19, no. 3 (2023): 1742-2043.

c Mirko Nazzari, "Lost in the Maze: Disentangling the Behavioral Variety of Money Laundering," *European Journal on Criminal Policy and Research* 30, no. 3 (2024): 379-97, <https://doi.org/10.1007/s10610-023-09572-8>.

## Between a quarter and half of illegal net income acquired through opiate and methamphetamine trafficking is invested or consumed abroad

In most countries on the Balkan route, between a quarter and half of the illicit net income from illegal drug markets related to opiates and methamphetamines is moved abroad, according to data provided by UN Member States in the ARQ.<sup>52</sup> Given the total annual net income of US\$13.7 billion, this amounted to between US\$3.4 and US\$6.9 billion of financial resources that crossed borders every year between 2019 and 2022 to manage profits made through opiate and methamphetamine trafficking along the entire route. These estimates are based on data on the share of net income possibly moving abroad for a few countries for the period 2019-2022; therefore, they come with a large margin of uncertainty. However, the finding that more than half of the profits remain in the country where the illegal income is generated is consistent with other studies on transnational money laundering.<sup>53</sup>

Moving capital abroad makes it harder for investigators to trace the illicit origin of money due to technical hurdles (e.g., complex financial instruments, offshore banking, cryptocurrency transactions) and procedural barriers (e.g., challenges in international cooperation, differing legal frameworks, and jurisdictional limitations).<sup>54</sup> Laundering money domestically also has several advantages. Domestic operations allow individuals to work in a familiar environment and to leverage personal networks and established relationships while minimizing the involvement of intermediaries. This makes managing illicit funds simpler, more efficient, and safer, particularly in the case of smaller sums.<sup>55</sup> These advantages, coupled with practical constraints, may explain why only a minority of those involved in the drug trade are believed to move their illegal earnings abroad thus generating IFFs related to income management.<sup>56</sup>

## Drug trafficking hubs tend to attract money laundering activities

Physical drug trafficking routes and proximity shape the flow of financial resources and income management-related IFFs. The available information on opiate and methamphetamine flows and on money laundering activities indicates that the geographical flows of drug profits moved abroad often overlap with drug trafficking routes and tend to be regional. For instance, key transit points located along the Balkan route such as Albania, Bosnia and Herzegovina, Serbia and Türkiye may play a role in attracting IFFs from drug trafficking.<sup>57</sup> Information provided by UN Member States through the ARQ suggests

that the Netherlands (Kingdom of the), Spain and the United Arab Emirates serve as both, destination and point of origin for drug-related IFFs, which is supported by findings from studies highlighting the key role of these countries in transnational money laundering schemes.<sup>58</sup> The Netherlands (Kingdom of the) and Spain are also major hubs for the physical distribution of drugs. Between March 2022 and February 2024, the United Arab Emirates were placed on the Financial Action Task Force (FATF) grey list due to significant shortcomings in their anti-money laundering framework, and as of September 2024, they continue to be on the European Union list of High Risk Third Countries for money laundering.<sup>59</sup>

Proximity also appears to be a factor in the flow of illicit finance between countries. For example, Sweden identifies Denmark as the primary source of funds from illegal drug markets. Similarly, Slovenian authorities point to nearby Italy as the main point of origin for illicit drug proceeds entering the country while Bosnia and Herzegovina and Serbia are identified as primary destinations.<sup>60</sup> This pattern is also evident in other cases, such as IFFs between France and Algeria and France and Morocco, where linguistic ties may contribute to these trends.

These findings should be interpreted with caution. The available data only provide an approximation of drug-related IFFs as numerous transactions go undetected and law enforcement agencies often lack specific information about the drugs involved in these financial activities. Interestingly, the ARQ data reveal a limited involvement of traditional tax havens. Neither Caribbean nor Asian tax havens appear as significant sources or destinations of IFFs for the 9 Balkan route countries that report this information. Conversely, the Netherlands (Kingdom of the) and Luxembourg are mentioned by multiple authorities as both origin and destination countries of drug-related IFFs. Notably, aside from Viet Nam, no countries on the FATF's black or grey lists are identified in the limited information provided in the ARQ.<sup>61</sup>

## Transfer methods include underground banking networks, bulk cash smuggling and cryptocurrencies

Responses to the ARQ highlight that traffickers operating in countries on the Balkan route between 2019 and 2022 often used informal systems like Hawala to discreetly move illegally sourced money across borders. Hawala, like other informal value transfer systems, is an ancient practice rooted in trust and honour. These systems allow for the quick and often anonymous transfer of value, typically across borders, without the movement of physical money.<sup>62</sup> Underground banking networks offer

global reach, anonymity, and accessibility to those excluded from formal financial systems. By handling large cash transactions and operating in regions beyond the purview of traditional banking, these networks facilitate money laundering and other illicit activities.<sup>63</sup>

The use of informal financial systems, such as Hawala, is prevalent in Southern Asia, a key region for the production of and trafficking in methamphetamine and opiates.<sup>64</sup> Afghanistan serves as a prime example, where Hawala has been widely employed for both licit and illicit financial transactions. Mazar-e Sharif emerged as a significant financial hub in Afghanistan, hosting numerous Hawala businesses in 2018.<sup>65</sup> Its relative stability compared to other regions, coupled with the decline of Kunduz as an illicit finance centre, contributed to Mazar-e Sharif's importance in the drug trade. However, it remains to be seen how the 2022 Taliban drug ban has affected its role.

Banking institutions can also facilitate drug trafficking activities. Traffickers can exploit the formal banking system through various means, including collusion with bank employees, utilizing money mule accounts, or exploiting weaknesses in anti-money laundering controls. Even

though they may be in compliance with customer due diligence regulations, banks may still struggle to detect drug trafficking-related transactions due to sophisticated laundering techniques or limitations in monitoring systems relative to the volume of transactions.<sup>66</sup>

Alongside both traditional and modern financial institutions, ARQ data also indicate the prominence of cash in laundering schemes. This suggests that the methods driving IFFs are often relatively simple, such as bulk cash smuggling, where cash is transported across borders, typically from destination markets back to the drug's source country (box 6). While this analysis focuses on income management-related IFFs, it is important to note that bulk cash smuggling is not, strictly speaking, money laundering, which involves concealing the illicit origins of funds. Conversely, bulk cash smuggling often highlights the questionable nature of the money, as it typically involves large-denomination bills rarely used in legitimate transactions.<sup>67</sup> This suggests that it is more commonly used to facilitate payments for drug shipments than going through money laundering schemes.

## Box 6: Bulk cash smuggling: a breakdown

Bulk cash smuggling typically involves multiple actors and stages.<sup>a</sup> The process usually starts with drug traffickers who need to move their profits from a consumer market (e.g., Europe) to a production region (e.g., Central Asia). Key players in this process include:

- **Drug traders:** The primary beneficiaries of the smuggling operation.
- **Money brokers:** Intermediaries who arrange the transportation of cash.
- **Coordinators:** Organize the logistics of the smuggling operation.
- **Couriers:** Individuals who physically transport the cash.

The smuggling process can be divided into four main stages:

- **Assignment:** Drug traders approach money brokers to arrange the transportation of their illegal proceeds.
- **Preparation:** Coordinators prepare the cash for smuggling by converting it into larger denominations, concealing it, and recruiting couriers.

- **Smuggling:** Couriers transport the concealed cash to the destination country.
- **Hand-over:** The cash is delivered to the designated recipient, often a representative of the drug trader.

This intricate process highlights the challenges faced by law enforcement in disrupting such networks. The use of cash, coupled with the involvement of numerous individuals, makes it difficult to trace the flow of funds and identify those responsible.

a Melvin Soudijn and Peter Reuter, "Cash and carry: the high cost of currency smuggling in the drug trade," *Crime, Law and Social Change* 66 (2016): 271-290; Michele Riccardi and Michael Levi, "Cash, Crime and Anti-Money Laundering," in *The Palgrave Handbook of Criminal and Terrorism Financing Law*, ed. Colin King, Clive Walker and Jimmy Gurulé (Cham: Palgrave Macmillan, 2018): 135-163; UNODC, *Afghan Opiate Trafficking along the Northern Route* (United Nations publication, 2018).

Cryptocurrencies are also used but are not prominently reported by Member States in the ARQ data. When they are mentioned, law enforcement agencies report that cryptocurrencies are used to conceal the illicit origins of money from drug trafficking.<sup>68</sup> They are essential for traffickers on dark net markets and can also facilitate payments in offline drug transactions due to their pseudonymity, elusiveness, and high tradability.<sup>69</sup> These digital currencies operate outside traditional financial systems, making it difficult to trace the flow of illicit funds. Their ability to facilitate rapid and anonymous transactions across borders poses a significant challenge to law enforcement and financial institutions seeking to disrupt illicit networks. Moreover, digital tools such as crypto mixers complicate transaction tracking further by making cryptocurrencies even more difficult to trace (box 7).

## Investments and consumption often take place in traditional sectors

Illicit drug profits, once moved abroad, are either spent or integrated into the legitimate economy through investments in a manner that makes it difficult to distinguish

from lawfully accumulated wealth. According to information from the ARQ, the investment and consumption of drug-related financial resources overlap primarily in traditional sectors such as real estate and luxury vehicles, either as private assets or through shell companies. Information provided by law enforcement agencies confirms the instrumental use of opaque corporate entities for facilitating transnational laundering activities, alongside direct investments and purchases.<sup>70</sup>

It is important to note that ARQ data do not distinguish between consumption and investment made locally or abroad; these two categories may, in fact, differ. However, the significance of real estate and luxury vehicles is corroborated by law enforcement investigations who point out that business sectors such as construction, real estate and the trade of cars and boats are primary areas of concern for transnational laundering schemes (box 8). All three sectors offer several attractive opportunities for traffickers looking to reinvest their money (box 9). They can absorb large amounts of cash and have the potential to maintain or increase in value over time. Additionally, they provide material gratification and serve as visible symbols of success.<sup>71</sup>



### Box 7: ChipMixer – A cryptocurrency laundering hub

Crypto mixers, also known as tumblers, are services that hide the origins of cryptocurrency transactions by breaking down and mixing users' funds with others on the blockchain. They have become a critical tool for laundering cryptocurrency obtained through trafficking, ransomware attacks, and other illicit activities.<sup>a</sup> Users send their cryptocurrency to the mixer, which then splits the funds into smaller parts and redistributes them, ensuring each user receives the same amount but from various sources. This process makes it difficult to trace the original source and destination of the funds.<sup>b</sup>

ChipMixer was a sophisticated cryptocurrency mixing service that played a pivotal role in facilitating money laundering for a range of activities, including trafficking, ransomware and fraud. Operating from mid-2017, the platform offered a high degree of anonymity to its clients by breaking the blockchain trail of cryptocurrency transactions.

By converting deposited funds into "chips" and then recombining them, ChipMixer effectively obscured the original source of the money. This service was particularly attractive to those seeking to launder illicit proceeds. The platform operated on both the clearnet and darknet, expanding its reach and accessibility.

A joint operation by German, US and Europol authorities in March 2023 led to the takedown of ChipMixer's infra-

structure. Authorities seized approximately €44 million in Bitcoin and over 7 TB of data, providing critical insights into the platform's operations and its role in the illicit ecosystem. Investigations suggest that ChipMixer may have laundered over €2.7 billion in cryptocurrency, highlighting its significant impact on the global financial system.

The dismantling of ChipMixer was a significant blow to illicit activities, but it also underscores the ongoing challenge of combating cryptocurrency-based money laundering. As new mixing services emerge, law enforcement and regulatory agencies must continue to adapt their strategies to stay ahead of the curve.<sup>c</sup>

a Mirko Nazzari, "From Payday to Payoff: Exploring the Money Laundering Strategies of Cybercriminals," *Trends in Organized Crime*, 2023, <https://doi.org/10.1007/s12117-023-09505-1>; Željko Bjelajac and Momčilo B. Bajac, "Blockchain Technology and Money Laundering," *Pravo Teorija i Praksa* 39 (n.d.): 21.

b Zhipeng Wang et al., "On How Zero-Knowledge Proof Blockchain Mixers Improve, and Worsen User Privacy," in *Proceedings of the ACM Web Conference 2023*, 2023, 2022–32; Mazhar M. Rathore, Sushil Chaurasia, and Dharendra Shukla, "Mixers Detection in Bitcoin Network: A Step towards Detecting Money Laundering in Cryptocurrencies," in *2022 IEEE International Conference on Big Data (Big Data)*, 2022, 5775–82, <https://doi.org/10.1109/BigData55660.2022.10020982>.

c EUROPOL, "One of the Darkweb's Largest Cryptocurrency Laundromats Washed Out" (The Hague: EUROPOL, 2023).



## Box 8: A case study of international drug and money laundering rings

In October 2023, Spanish police arrested nine suspected members of an international criminal organization accused of drug trafficking and money laundering through shell companies and seemingly legitimate businesses in Belgium and the United Kingdom of Great Britain and Northern Ireland, and of selling stolen cars. This case highlights the sophisticated methods used to launder profits from illicit activities.

### Key tactics employed by the organization

- **Use of front men:** To distance the true organizers from their illicit activities, the suspects employed individuals to act as the public faces of their operations.
- **Falsified invoices:** Fake invoices were used to create a veneer of legitimate transactions, disguising the true origin of the funds.
- **Selective transactions:** The organization conducted transactions with individuals less likely to be scrutinized by law enforcement, reducing the risk of detection.
- **Frequent changes in administration:** Company administrators were frequently changed to obscure the control of the organization and complicate investigations.
- **Irregular real estate deals:** Engaging in irregular real estate transactions – such as all-cash transactions, the use of complex ownership structures or the over- or undervaluation of a property – provided another layer of complexity and obfuscation in their money laundering efforts.
- **Foreign accounts:** The use of foreign accounts facilitated the movement of funds across borders, complicating the tracking of illicit finances.

### Enforcement actions and seizures

- **Searches and seizures:** The police conducted searches at 12 locations, seizing cash, dozens of mobile phones, several vacuum packaging machines, two cannabis sativa plantations, other illegal drugs, stolen license plates, and two handguns.
- **High-end vehicles:** Fourteen stolen luxury vehicles were confiscated, some of which had been modified to conceal their illicit origins for resale. Two vehicles contained hidden compartments designed for drug transport.
- **Frozen bank accounts:** Thirty bank accounts linked to the criminal network were frozen to prevent further illicit financial activities.

### Luxury vehicles and drug transport

The use of luxury vehicles for transporting illicit drugs is a recurring tactic. In a similar case, another criminal network used vehicles not only for sale to legitimate dealers but also for drug trafficking. These vehicles were made accessible to other networks through deceptive renting schemes. Vehicles were registered under companies fronted by associates or used directly to transport illegal narcotics.<sup>a</sup>

<sup>a</sup> Erika Di Benedetto, “Spanish Police Bust International Drug Network; 9 Arrested” (Washington, D.C.: Organized Crime and Corruption Reporting Project, 2023).



## Box 9: Real estate as a money laundering tool

Real estate has long been a favoured vehicle for money laundering due to its ability to absorb large sums of cash, appreciate and generate legitimate income streams.<sup>a</sup> The opacity of certain real estate transactions, coupled with the often-complex nature of property ownership, makes it an attractive option for those seeking to conceal the illicit origins of their funds.

### Key characteristics of real estate as a money laundering tool

- **High-value transactions:** The purchase of real estate typically involves substantial sums of money, making it ideal for integrating large amounts of illicit cash into the legitimate economy.
- **Asset appreciation:** Property values tend to rise over time, allowing those laundering money to increase the value of their illicit funds.
- **Generation of legitimate income:** Rental properties can produce consistent cash flow, further obscuring the origins of the investment.
- **Complex ownership structures:** The use of shell companies, trusts, and nominees can help to conceal the true ownership of property.
- **Geographical diversification:** Investing in properties in different jurisdictions can spread the risk and make it more difficult for authorities to trace the funds.

### Money laundering techniques in real estate

- **Overvaluation:** Inflating property values to justify the investment of illicit funds.
- **Underreporting income:** Failing to declare the full rental income generated by a property.
- **Structuring transactions:** Breaking down large sums of money into smaller amounts to avoid reporting requirements.
- **Cash-in-hand purchases:** Using physical cash to acquire properties, bypassing financial institutions.

a Emanuele Sciafani, *Investment of criminal proceeds into the legitimate economy* (London: Routledge, 2024); Marco Dugato, Serena Favarin and Luca Giommoni, "The risks and rewards of organized crime investments in real estate," *British Journal of Criminology* 55, no. 5 (2015): 944-965; Emanuele Sciafani and Anita Lavorgna, "Money laundering schemes through real estate markets: A systematic review," in *Criminal Defiance in Europe and Beyond: From Organised Crime to Crime-Terror Nexus*, ed. Peter van Duyn, Dina Siegel, Georgios A. Antonopoulos, Jackie H. Harvey and Klaus von Lampe (The Hague: Eleven International Publishing, 2020): 373-399.

## Annex 1 – Definitions and conceptual framework

IFFs are ‘financial flows that are illicit in origin, transfer or use, that reflect an exchange of value and that cross-country borders.’<sup>72</sup> As this definition highlights, IFFs are multidimensional and arise from various activities. This section clarifies the concepts related to IFFs and their different forms.

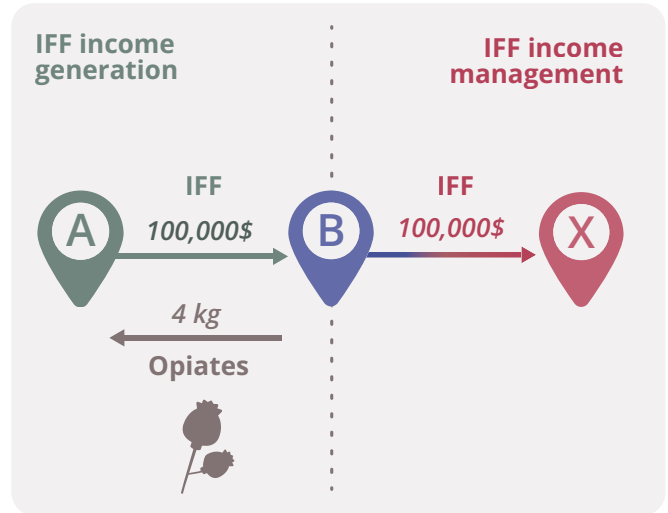
### IFFs: Income management and generation

The first important distinction is between IFFs from **income generation** and **income management**. IFFs related to income generation involve transactions from the production and trade of illegal goods and services. Therefore, income generation describes transactions between residents of two distinct countries that directly generate illicit income or that are performed in the context of the production of illicit goods and services. An example is a payment for trafficking a shipment of illegal drugs across countries. IFFs related to income management occur when illicit income is used for investing in assets or buying goods and services in a different country. For example, using the profits from drug trafficking to purchase real estate abroad.<sup>73</sup>

Figure 9 illustrates the difference between IFFs related to the income generation and income management phases. The trafficking of four kilograms of opiates which are transferred from the *resident of country B* to a *resident of country A* (grey arrow) results in a corresponding IFF related to income generation equal to US\$100,000 moving in the opposite direction as payment for the drug shipment (green arrow). On the other hand, a corresponding IFF from *Country B* to *Country X* (red arrow) may derive from income management, as it involves traffickers investing their illicit income from opiate trafficking in a third country. Both are IFFs, but they are of different natures.

This is a theoretical simplified model. In reality, the drug shipment might move between two countries while the payment might take a different direction or stay in the drug destination country. Similar complexity emerges with respect to income management too.<sup>74</sup>

FIG. 9: Example of IFFs during income generation and income management



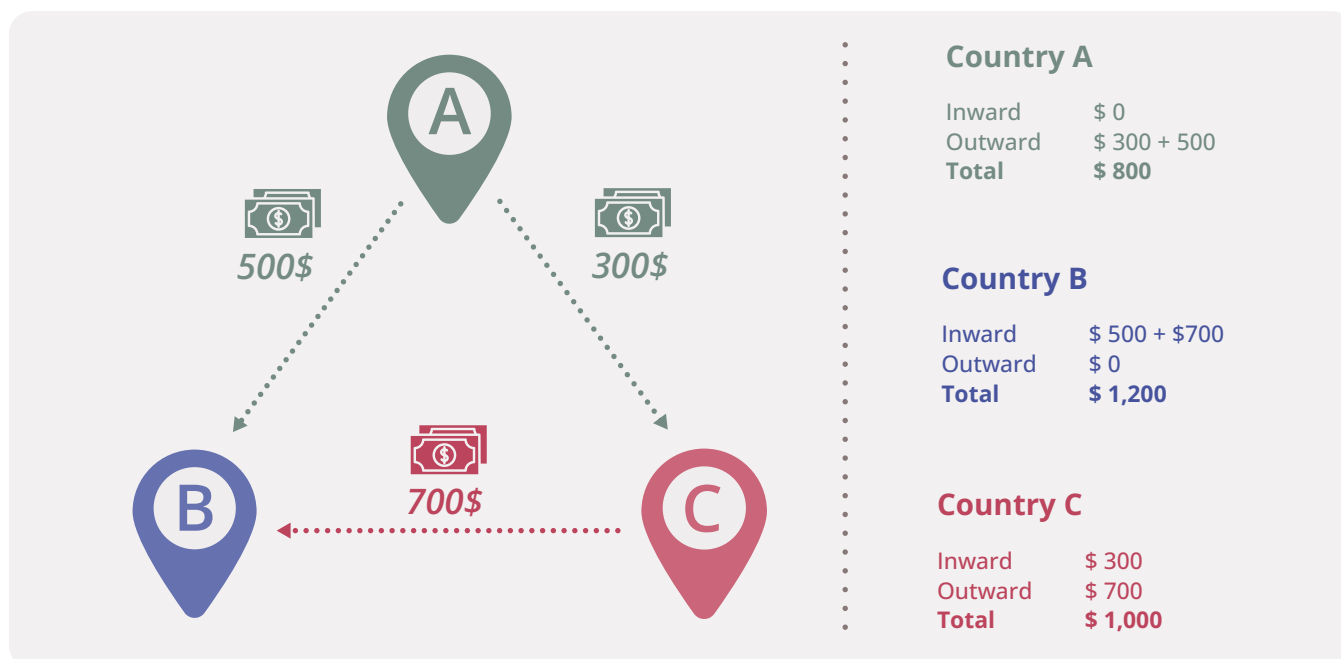
### IFFs: Inwards, outwards and total

There is another important distinction when considering IFFs: **inward and outward IFFs**. When illicit goods or services are sold, money flows from the buyer to the seller. Whether buyer and seller are permanent residents in distinct countries, this is an outward IFF from the buyer’s perspective and an inward IFF from the seller’s perspective.

Figure 10 clarifies the difference between inward and outward IFFs. *Residents in country A* have no inward IFFs since they do not receive any money. Their outward IFFs amount to US\$800, as they transfer money to *residents in country B* and *residents in country C*. *Residents in country C*’s inward IFF is US\$300, which also corresponds to the outward IFF from the *residents in country A* to the *residents in country C*.

The total values of IFFs interesting a country is the sum of inward and outward IFFs referred to that same country. For country C, this totals US\$1,000, with US\$300 corresponding to inward IFFs and US\$700 to outward IFFs.<sup>75</sup>

FIG. 10: Example of inward, outward and total illicit financial flows



### Illicit income: gross and net

Another set of statistics is important for understanding the nature of IFFs: illicit gross income, intermediate expenditure, and illicit net income.

In the case of illicit drug markets, **illicit gross income** for a country is determined by two factors: (1) the value of the drugs consumed within the country, and (2) the money earned from exporting drugs to other countries. When drug traffickers who reside in a country earn US\$100 million from exporting opiates and US\$500 million from consumption, their illicit gross income is US\$600 million.

Illicit gross income, however, does not account for **intermediate expenditure**, which is the value of inputs acquired to provide illicit drugs. This includes costs for buying opiates or methamphetamine from other countries and expenses for corrupting public officials.<sup>76</sup> In the

previous example, if US\$200 million is spent on securing opiates used for national consumption and export, this amount is the intermediate expenditure.

**Illicit net income** is the value of consumption and exports minus the intermediate costs for imports. It represents the income that remains with traffickers after deducting all expenditures. Building on the previous example, the net income for this country is US\$400 million, which equates to a gross income of US\$600 million minus US\$200 million of intermediate expenditure.

## Annex 2 – Estimating the value of drug flows

This report uses a six-step methodology to estimate the value of opiate and methamphetamine trafficking along the Balkan route (figure 11). The UNODC originally developed this methodology to investigate opiate trafficking.<sup>77</sup> Later studies adopted this approach to explore cocaine trafficking too.<sup>78</sup>

**Step 1** identifies drug trafficking flows between any two countries. Drug trafficking flows are described as a network where nodes represent countries, and weighted edges represent the quantity of opiates and methamphetamine exchanged between any two countries. Information on drug seizures - including countries of production, departure, transit, and destination of intercepted loads - from the UNODC Drug Monitoring Platform (DMP) is used to estimate whether two countries share an edge in the trafficking networks.

For each country of the Balkan Route, **Step 2** identifies the relative weight of each inward connection, i.e. the proportion of opiates and methamphetamine that an importing country imports from each exporting country it is connected to. The relative weight is equal to the share of drug that is seized along each inward connection. In this phase, incoming connections below a 4 per cent threshold are removed to reduce the potential bias from large seizures on small connections.

**Step 3** estimates the internal demand of each country, which is given by the sum of opiates and methamphetamine consumed and seized in the country. Consumption is estimated following the most widely used approach in the literature.<sup>79</sup> Prevalence data from the UNODC and population data from the UN Department of Economic and Social Affairs are used to estimate the number of people who use opiates and methamphetamine in each country. These figures are then multiplied by average per-user consumption data from the European Union Drugs Agency (EUDA, formerly EMCDDA) to obtain national consumption estimates.<sup>80</sup> Seizures are converted in pure drug equivalent by multiplying the reported amount of drug seized by the average purity at trafficking level.

**Step 4** estimates the quantity of drug imported by each country, which is equal to the drug consumed and seized in a country plus the drug exported to other countries, minus the drug produced domestically. In the case of opiates, domestic production is assumed to be zero except for Afghanistan, which acts as sole source of illicit opiates flowing along the route. In the case of methamphetamine, domestic production is assumed to be zero except for

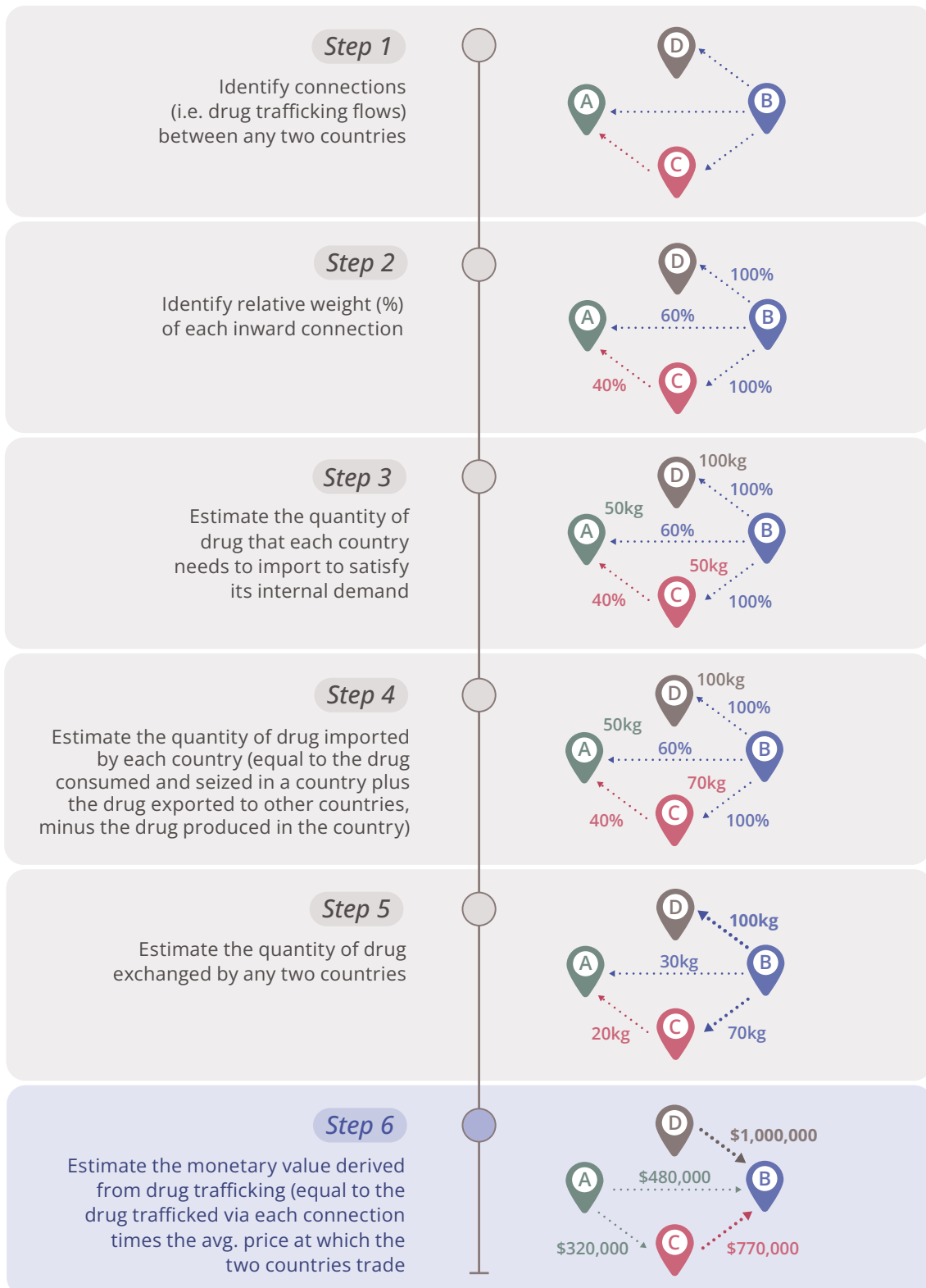
countries where methamphetamine labs were seized and where large methamphetamine seizures occurred far from transport hubs such as ports and airports. The ratio between seizures that occurred far from, and close to, transport hubs is also used to estimate the ratio between the quantity of drug produced domestically and the quantity of drug imported from other countries.

**Step 5** estimates the quantity of drug exchanged by any two countries by combining the information on the relative weight of each connection (Step 2) and on the quantity of drug imported by each country (Step 4).

Finally, **Step 6** estimates the monetary value of opiate and methamphetamine trafficking. The value of opiate and methamphetamine flows between any two countries is equal to the quantity exchanged by the countries multiplied by the average exchange price between the same two countries. This country-based approach introduces a discrepancy with the *Conceptual Framework for the Statistical Measurement of Illicit Financial Flows* developed by UNODC and UN Trade and Development (UNCTAD), which attributes IFFs to the actors' countries of citizenship.<sup>81</sup> However, due to limitations in available data, it is not feasible to make reasonable assumptions about the nationalities of individuals trafficking heroin and methamphetamine transnationally along the Balkan route.

At the country level, the gross income is equal to the income generated at retail level and the income from sales at international level. The former is calculated by multiplying the quantity of drug consumed in a country by the price at retail; the latter is calculated by multiplying the quantity of drug exported by a country by the average exchange price for each of its outward connections. The net income is calculated by subtracting intermediate expenditures at retail, wholesale, and international level from the gross income generated at retail, wholesale, and international level, respectively. Intermediate expenditure includes the costs incurred by traffickers to purchase opiates and methamphetamine and production costs.

FIG. 11: Steps taken to estimate the value of drug trafficking



## Annex 3 – Data tables

Table 1: Estimated total gross income from opiate trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	82.3	102.9	125.9
Austria	197.4	247.7	303.6
Belgium	453	558.9	676.5
Bosnia and Herzegovina	21.8	27.4	33.6
Bulgaria	105.5	131.7	160.8
Croatia	30.5	38.3	47.0
Czechia	41.9	52.4	64.1
Denmark	291.2	366.0	449.2
France	368.0	462.3	567.0
Germany	638.4	802.4	984.6
Greece	78.1	97.8	119.6
Hungary	131.6	165.3	202.8
Iran (Islamic Republic of)	4572.3	5728.6	7013.3
Ireland	491.8	618.3	758.8
Italy	1097.9	1380.2	1693.8
Kosovo	13.1	16.4	20.2
Luxembourg	2.2	2.7	3.4
Montenegro	3.7	4.6	5.7
Netherlands (Kingdom of the)	177.9	221.1	269.2
North Macedonia	49.0	61.3	75.0
Norway	101.0	127.0	155.8
Poland	138.6	174.2	213.8
Portugal	16.4	20.6	25.2
Romania	318.4	399.8	490.3
Serbia	16.8	21.1	25.9
Slovakia	29.6	37.3	45.7
Slovenia	46.5	58.3	71.3
Spain	132.1	166.0	203.7
Sweden	133.5	167.8	206.0
Switzerland	171.5	215.6	264.5
Türkiye	372.7	459.9	556.7
United Kingdom of Great Britain and Northern Ireland	2062.6	2592.9	3182

Source: Calculations based on UNODC data.

Table 2: Estimated total gross income from methamphetamine trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	1.0	1.2	1.5
Austria	76.4	96.1	118.0
Belgium	61.6	77.6	94.9
Bosnia and Herzegovina	12.7	16.0	19.6
Bulgaria	21.6	27.3	33.3
Croatia	32.7	41.1	50.4
Czechia	58.1	74.2	91.0
Denmark	29.8	37.5	46.0
France	50.3	63.2	77.6
Germany	308.8	389.0	476.2
Greece	3.1	4.0	4.9
Hungary	5.8	7.3	8.9
Iran (Islamic Republic of)	125.5	155.2	188.0
Ireland	18.0	22.6	27.8
Italy	132.0	166.0	203.7
Kosovo	1.7	2.1	2.6
Luxembourg	0.4	0.5	0.7
Montenegro	0.5	0.6	0.8
Netherlands (Kingdom of the)	125.4	158.2	193.9
North Macedonia	0.3	0.4	0.5
Norway	8.3	10.4	12.7
Poland	69.8	87.8	107.6
Portugal	0.2	0.2	0.3
Romania	3.8	4.8	5.9
Serbia	7.7	9.7	11.9
Slovakia	74.7	95.0	116.4
Slovenia	5.3	6.7	8.2
Spain	71.0	89.3	109.6
Sweden	21.1	26.5	32.6
Switzerland	20.3	25.5	31.3
Türkiye	21.6	27.3	33.1
United Kingdom of Great Britain and Northern Ireland	161.0	202.3	248.3

Source: Calculations based on UNODC data.

Table 3: Estimated net income at retail from opiate trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	8.5	10.6	13.1
Austria	147.2	185.1	227.2
Belgium	14.1	17.7	21.7
Bosnia and Herzegovina	15.0	18.8	23.1
Bulgaria	11.6	14.6	17.9
Croatia	21.5	27.0	33.2
Czechia	24.3	30.6	37.6
Denmark	228.6	287.4	352.8
France	197.0	247.7	304.0
Germany	427.6	537.5	659.7
Greece	18.4	23.1	28.4
Hungary	82.2	103.4	126.9
Iran (Islamic Republic of)	3633.1	4567.3	5605.3
Ireland	372.0	467.7	574.0
Italy	712.1	895.2	1098.6
Kosovo	8.6	10.9	13.3
Luxembourg	1.6	2.0	2.4
Montenegro	2.4	3.0	3.6
Netherlands (Kingdom of the)	51.3	64.5	79.1
North Macedonia	14.6	18.4	22.6
Norway	87.0	109.4	134.3
Poland	98.1	123.3	151.3
Portugal	3.6	4.5	5.5
Romania	209.1	262.9	322.6
Serbia	3.4	4.2	5.2
Slovakia	24.8	31.2	38.3
Slovenia	9.6	12.0	14.8
Spain	73.8	92.8	113.8
Sweden	106.8	134.2	164.8
Switzerland	108.7	136.7	167.7
Türkiye	18.2	22.8	28.0
United Kingdom of Great Britain and Northern Ireland	1440.4	1810.7	2222.3

Source: Calculations based on UNODC data.



Table 4: Estimated net income at retail from methamphetamine trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	0.8	0.9	1.2
Austria	62.5	78.6	96.5
Belgium	38.0	47.8	58.7
Bosnia and Herzegovina	10.8	13.6	16.7
Bulgaria	9.5	11.9	14.6
Croatia	18.0	22.6	27.8
Czechia	11.9	15.0	18.4
Denmark	19.7	24.7	30.3
France	27.5	34.6	42.4
Germany	175.3	220.4	270.5
Greece	0.2	0.2	0.3
Hungary	2.3	3.0	3.6
Iran (Islamic Republic of)	89.9	116.0	142.4
Ireland	8.3	10.5	12.9
Italy	92.9	116.8	143.3
Kosovo	1.1	1.4	1.7
Luxembourg	0.3	0.4	0.4
Montenegro	0.4	0.5	0.7
Netherlands (Kingdom of the)	67.4	84.7	104.0
North Macedonia	0.2	0.2	0.3
Norway	6.2	7.8	9.6
Poland	16.4	20.6	25.2
Portugal	0.1	0.2	0.2
Romania	1.7	2.2	2.7
Serbia	5.5	6.9	8.5
Slovakia	26.2	32.9	40.4
Slovenia	2.8	3.5	4.4
Spain	53.5	67.2	82.5
Sweden	15.4	19.3	23.7
Switzerland	11.5	14.5	17.8
Türkiye	7.0	7.1	7.5
United Kingdom of Great Britain and Northern Ireland	126.2	158.7	194.8

Source: Calculations based on UNODC data.

Table 5: Estimated net income at wholesale from opiate trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	2.0	2.5	3.1
Austria	8.0	10.1	12.3
Belgium	0.7	0.9	1.1
Bosnia and Herzegovina	1.1	1.4	1.7
Bulgaria	4.3	5.4	6.6
Croatia	2.7	3.4	4.2
Czechia	1.3	1.7	2.1
Denmark	16.9	21.3	26.2
France	23.9	30.1	36.9
Germany	35.9	45.2	55.4
Greece	3.0	3.7	4.6
Hungary	7.9	9.9	12.2
Iran (Islamic Republic of)	122.6	154.1	189.1
Ireland	32.5	41.0	50.3
Italy	72.0	90.6	111.2
Kosovo	0.8	1.0	1.3
Luxembourg	0.1	0.1	0.2
Montenegro	0.2	0.3	0.4
Netherlands (Kingdom of the)	3.7	4.7	5.7
North Macedonia	1.7	2.2	2.7
Norway	2.6	3.3	4.0
Poland	5.7	7.1	8.8
Portugal	2.4	3.0	3.7
Romania	16.1	20.3	24.9
Serbia	1.4	1.8	2.2
Slovakia	1.4	1.8	2.2
Slovenia	1.2	1.5	1.9
Spain	10.1	12.7	15.6
Sweden	7.7	9.7	12.0
Switzerland	11.8	14.8	18.1
Türkiye	1.5	1.9	2.3
United Kingdom of Great Britain and Northern Ireland	111.8	140.5	172.5

Source: Calculations based on UNODC data.

**Table 6: Estimated net income at wholesale from methamphetamine trafficking**  
(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	0.1	0.1	0.1
Austria	2.1	2.7	3.3
Belgium	3.7	4.7	5.8
Bosnia and Herzegovina	0.6	0.8	1.0
Bulgaria	0.8	1.0	1.2
Croatia	2.5	3.1	3.9
Czechia	1.9	2.4	2.9
Denmark	1.9	2.4	2.9
France	4.3	5.4	6.6
Germany	12.1	15.2	18.6
Greece	0.2	0.2	0.2
Hungary	0.6	0.8	0.9
Iran (Islamic Republic of)	4.5	5.7	7.0
Ireland	1.8	2.3	2.8
Italy	7.3	9.2	11.3
Kosovo	0.1	0.1	0.2
Luxembourg	0.0	0.0	0.0
Montenegro	0.0	0.0	0.0
Netherlands (Kingdom of the)	6.1	7.7	9.4
North Macedonia	0.0	0.0	0.0
Norway	0.6	0.8	1.0
Poland	9.1	11.4	14.0
Portugal	0.0	0.0	0.0
Romania	0.3	0.4	0.5
Serbia	0.3	0.4	0.5
Slovakia	2.0	2.5	3.1
Slovenia	0.3	0.3	0.4
Spain	3.3	4.1	5.1
Sweden	1.9	2.4	2.9
Switzerland	1.6	2.0	2.4
Türkiye	0.3	0.4	0.4
United Kingdom of Great Britain and Northern Ireland	6.9	8.6	10.6

Source: Calculations based on UNODC data.

**Table 7: Estimated net income at international level from opiate trafficking**  
(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	5.9	7.4	9.1
Austria	23.7	29.6	36.2
Belgium	250.9	310.3	376.4
Bosnia and Herzegovina	1.4	1.8	2.2
Bulgaria	9.8	13.4	17.5
Croatia	2.6	3.3	4.1
Czechia	6	7.4	9
Denmark	16.9	21.3	26.1
France	14.3	23.2	33.2
Germany	29.9	40.5	52.2
Greece	18.0	23.2	28.9
Hungary	8.5	10.7	13.2
Iran (Islamic Republic of)	27.5	89.9	159.3
Ireland	31.9	40.3	49.6
Italy	64.3	83.0	103.7
Kosovo	0.7	0.9	1.1
Luxembourg	0.1	0.2	0.2
Montenegro	0.2	0.3	0.4
Netherlands (Kingdom of the)	17.9	25.6	34.3
North Macedonia	3.9	4.9	6.0
Norway	1.9	2.6	3.3
Poland	9	11.3	13.9
Portugal	1.8	2.4	3.1
Romania	40.1	50.4	61.8
Serbia	1.5	2.1	2.8
Slovakia	1.4	1.8	2.2
Slovenia	11.9	15.2	18.8
Spain	6.8	9.6	12.7
Sweden	7.7	9.7	11.9
Switzerland	9.3	12.3	15.7
Türkiye	197.3	255.3	319.8
United Kingdom of Great Britain and Northern Ireland	83.8	114	147.5

Source: Calculations based on UNODC data.

**Table 8: Estimated net income at international level from methamphetamine trafficking**  
(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	0.1	0.1	0.1
Austria	8.5	10.7	13.2
Belgium	8.7	10.9	13.3
Bosnia and Herzegovina	0.7	0.8	1.0
Bulgaria	0.4	0.6	0.9
Croatia	3.0	3.5	4.2
Czechia	43.1	55.4	67.8
Denmark	2.0	2.3	2.8
France	2.1	2.8	4.0
Germany	95.2	120.4	147.0
Greece	2.7	3.4	4.2
Hungary	0.6	0.7	0.9
Iran (Islamic Republic of)	0.0	0.2	3.1
Ireland	2.0	2.3	2.8
Italy	7.8	9.0	11.1
Kosovo	0.1	0.1	0.2
Luxembourg	0.0	0.0	0.0
Montenegro	0.0	0.0	0.0
Netherlands (Kingdom of the)	13.3	16.4	20.2
North Macedonia	0.0	0.0	0.0
Norway	0.6	0.8	1.0
Poland	21.0	26.3	32.6
Portugal	0.0	0.0	0.0
Romania	0.6	0.7	0.8
Serbia	0.6	0.7	0.8
Slovakia	45.7	58.5	71.5
Slovenia	0.7	0.8	1.0
Spain	3.2	3.7	4.6
Sweden	2.0	2.5	3.0
Switzerland	1.8	2.0	2.5
Türkiye	0.2	1.9	3.6
United Kingdom of Great Britain and Northern Ireland	7.5	8.6	10.6

Source: Calculations based on UNODC data.

Table 9: Estimated total net income from opiate trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	16.4	20.6	25.3
Austria	178.9	224.8	275.7
Belgium	265.7	328.9	399.2
Bosnia and Herzegovina	17.5	22.0	27.0
Bulgaria	25.6	33.3	41.9
Croatia	26.9	33.8	41.5
Czechia	31.7	39.7	48.7
Denmark	262.5	330.0	405.1
France	235.2	301.0	374.2
Germany	493.4	623.1	767.3
Greece	39.4	50.0	61.9
Hungary	98.6	124	152.2
Iran (Islamic Republic of)	3783.1	4811.3	5953.7
Ireland	436.4	548.9	673.9
Italy	848.4	1068.7	1313.5
Kosovo	10.2	12.8	15.7
Luxembourg	1.8	2.2	2.7
Montenegro	2.8	3.6	4.4
Netherlands (Kingdom of the)	72.9	94.8	119.1
North Macedonia	20.3	25.4	31.2
Norway	91.6	115.3	141.7
Poland	112.7	141.8	174
Portugal	7.7	9.9	12.3
Romania	265.3	333.5	409.3
Serbia	6.3	8.2	10.2
Slovakia	27.6	34.7	42.6
Slovenia	22.7	28.7	35.5
Spain	90.7	115.1	142.2
Sweden	122.1	153.6	188.6
Switzerland	129.7	163.8	201.5
Türkiye	217	280	350.1
United Kingdom of Great Britain and Northern Ireland	1635.9	2065.2	2542.2

Source: Calculations based on UNODC data.

Table 10: Estimated total net income from methamphetamine trafficking

(Millions of US\$, 2019-2022 average)

	Low estimate	Preferred estimate	High estimate
Albania	0.9	1.1	1.4
Austria	73.2	92.0	112.9
Belgium	50.4	63.4	77.8
Bosnia and Herzegovina	12.1	15.2	18.7
Bulgaria	10.6	13.5	16.7
Croatia	23.5	29.3	35.9
Czechia	56.9	72.7	89.1
Denmark	23.5	29.4	36.1
France	33.9	42.7	53.0
Germany	282.5	355.9	436.1
Greece	3.0	3.8	4.7
Hungary	3.6	4.4	5.4
Iran (Islamic Republic of)	94.4	121.9	152.4
Ireland	12.1	15.0	18.5
Italy	108.0	134.9	165.7
Kosovo	1.3	1.7	2.0
Luxembourg	0.3	0.4	0.5
Montenegro	0.5	0.6	0.7
Netherlands (Kingdom of the)	86.9	108.8	133.6
North Macedonia	0.2	0.3	0.3
Norway	7.5	9.4	11.5
Poland	46.4	58.2	71.9
Portugal	0.1	0.2	0.2
Romania	2.6	3.3	4.0
Serbia	6.4	8.0	9.8
Slovakia	73.8	93.9	115.0
Slovenia	3.7	4.7	5.8
Spain	59.9	75.1	92.2
Sweden	19.3	24.2	29.7
Switzerland	14.8	18.5	22.7
Türkiye	3.8	7.5	11.3
United Kingdom of Great Britain and Northern Ireland	140.6	176.0	215.9

Source: Calculations based on UNODC data.

## Endnotes

- 1 UNODC and UNCTAD, *Conceptual Framework for the Statistical Measurement of Illicit Financial Flows* (United Nations publication, 2020).
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- 4 Ibid.
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- 8 References to Kosovo shall be understood in the context of Security Council resolution 1244 (1999).
- 9 UNODC and UNCTAD define Illicit Financial Flows as "financial flows that are illicit in origin, transfer or use, that reflect an exchange of value and that cross-country borders." See UNODC and UNCTAD, *Conceptual Framework for the Statistical Measurement of Illicit Financial Flows*.
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- 14 An in-depth discussion on the functioning of organized criminal groups involved in opiate trafficking on the Balkan route is provided in UNODC, *Opiate trafficking in the Balkans* (United Nations publication, 2024).
- 15 UNODC, *Drug Money: The Illicit Proceeds of Opiates Trafficked on the Balkan Route* (United Nations publication, 2015).
- 16 In line with previous work published in the UNODC study *Drug Money: the illicit proceeds of opiates trafficked on the Balkan route*, the estimates presented in this study refer to the thirty-two Balkan route countries but do not include Afghan figures. See UNODC, *Drug Money: the illicit proceeds of opiates trafficked on the Balkan route* (United Nations publication, 2015).
- 17 The estimates provided here do not consider the impact of the Taliban ban on opiate trafficking. In April 2023, the Taliban banned poppy cultivation and the trafficking of all narcotics in Afghanistan. According to the Afghanistan Opium Survey, poppy cultivation has plummeted by 95 per cent, with production dropping from 6,200 tons in 2022 to a 20-year low of 333 tons in 2023. The latest available data analyzed here refer to the period 2019–2022 and thus do not cover the impact of the Taliban ban on opiate trafficking. Future studies should explore how and to what extent the Taliban ban impacts opiate trafficking along the Balkan route.
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## ENDNOTES

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- 44 The methamphetamine network constructed for this report includes 21 incoming ties from, and 23 outgoing ties to, non-Balkan route countries. The opiates network includes 36 incoming ties from, and 30 outgoing ties to, non-Balkan route countries.
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The Balkan route remains a critical pathway for trafficking opiates and, more recently, methamphetamine, stretching from Afghanistan through Iran (Islamic Republic of) and Türkiye, and splitting into three main branches, all leading into Europe. Between 2019 and 2022, trafficking of opiates and methamphetamine on the Balkan route yielded an estimated combined annual illicit net income of US\$13.7 billion. It is estimated that between a quarter and half of the illicit net income generated from these trafficking activities is illegally moved across borders, generating potential illicit financial flows related to the management of drug trafficking profits of US\$3.4 billion to US\$6.9 billion annually.

Efforts to understand the flow of assets related to drug trafficking should be strengthened, including identifying the beneficiaries of proceeds of crime, laundering typologies and networks and how the proceeds of crime are moved and stored.

