

VICTORIA A. GREENFIELD, BRYCE PARDO, JIRKA TAYLOR

Afghanistan in the Era of Fentanyl

Considering Potential Economic and Political Impacts of a Collapse in Demand for Afghanistan's Opiates

For more than a quarter century, Afghanistan's revenues from sales of opiates—opium, morphine, and heroin—that derive from its opium poppy have helped sustain its rural populations, support its economy, and, to its detriment, fuel corruption and insurgency (Greenfield et al., 2015, citing Byrd and Mansfield, 2014). Although many policymakers have sought to end these sales, few policy analysts have considered the broad impacts of a sudden, lasting end for Afghanistan (Humphreys, Caulkins, and Felbab-Brown, 2018).

In this Perspective, we ask, “What might happen to Afghanistan if demand for its opiates dropped off sharply and permanently?” And we suggest possible answers. More specifically, we explore the potential economic and political implications of an opiate market collapse for Afghanistan and, by extension, for ongoing foreign assistance and security interventions.

This scenario is plausible not because of an imagined demand-side reckoning with drug use but because illegally manufactured fentanyl—a potent, easy-to-produce, and inexpensive synthetic opioid—may displace heroin. Such a future is

unfolding already in the Americas, as heroin has largely been displaced by fentanyl in some illegal drug markets (Pardo et al., 2019; Drug Enforcement Administration, 2019; Congressional Research Service, 2019). So far, Afghanistan has likely enjoyed some protection from fentanyl's encroachment, because the majority of its customers reside outside the Americas. But, eventually, fentanyl's ascendance could hit Afghanistan, as markets realign or if distributors and dealers in Europe or Asia begin to source the synthetic alternative from producers who advertise their wares online.

To consider this future, we draw largely from our extensive research on related issues, discussions with other subject-matter experts (SMEs), recent publications from the U.S. government and United Nations (UN) organizations, and commentary and press reports on conditions in Afghanistan.¹ Whereas we relied most heavily on our own research to explore Afghanistan's relationship with opiates and the mechanisms by which fentanyl might drive them out, we turned to five SMEs, as noted in the text, to help us think through a possible future without opiates. This Perspective should interest a range of individuals in the international policy community, including U.S. policymakers, who track conditions in Afghanistan and are concerned about its future.²

We conclude that a collapse in the demand for Afghan opiates would have important implications for rural households, local powerbrokers, insurgents, and authorities in Kabul. It is hard to predict the future amid uncertainty about fentanyl's trajectory in major markets and political conditions in Afghanistan, but Afghanistan might need substantial international support if a collapse in the opiate market causes a humanitarian crisis that threatens the stability of the government in Kabul.

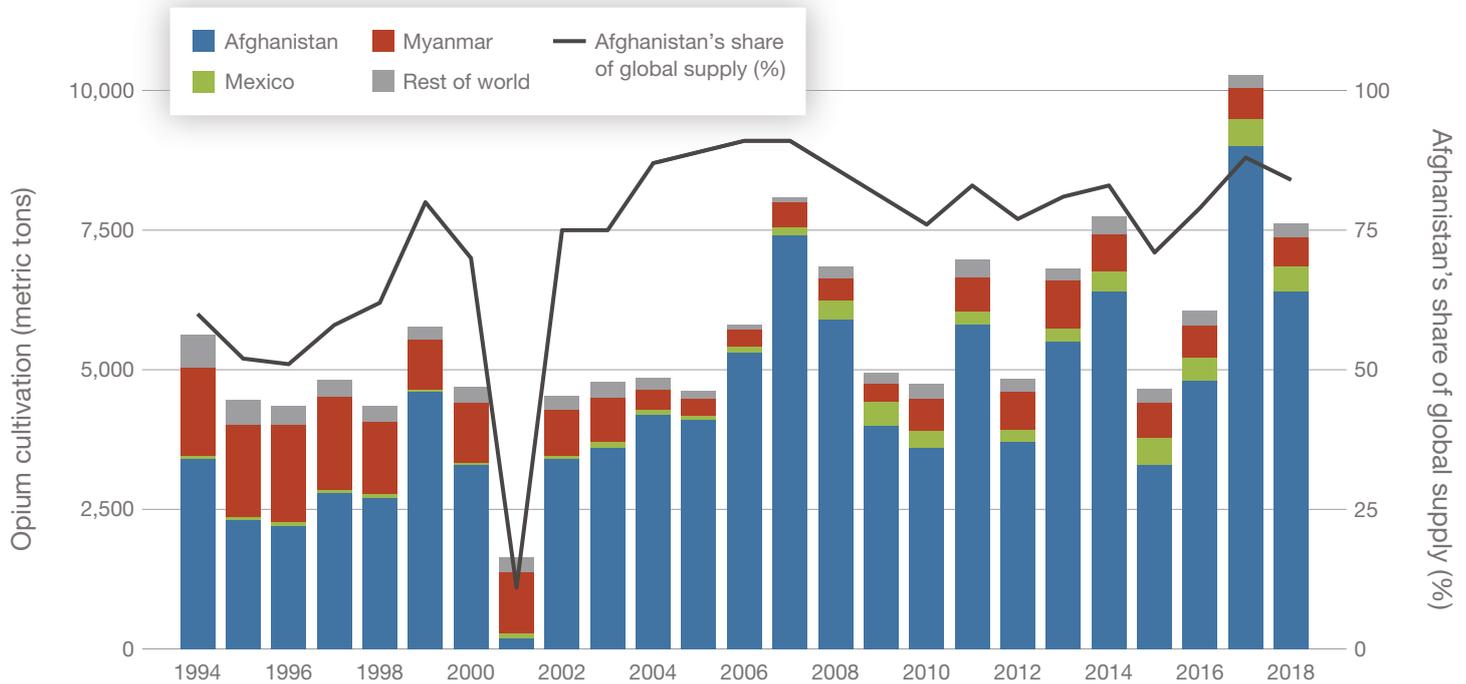
To lay a foundation for better understanding the implications of an opiate market collapse, we first discuss the role that opiates play in the Afghan economy and political landscape and the mechanisms by which fentanyl could overtake heroin.

Afghanistan's Relationship with Opiates

Opium poppy has been grown in the Golden Crescent—stretching through Iran, Afghanistan, and Pakistan—for many decades, but Afghanistan has dominated global illegal cultivation for the past two, as evident in opium production data (see Figure 1). As the country further descended into turbulence and violent conflict after the Soviet withdrawal in 1989, poppy cultivation increased and, by 1999, Afghanistan was the world's leading illegal supplier of opium by a very large margin (United Nations Office on Drugs and Crime [UNODC], 2005, 2016, 2020b).

Illegal cultivation has continued to flourish, enabled by weak governance and limited legal economic opportunities. In the 2000–2001 growing season, when the Taliban-led government instituted a ban on cultivation, estimated opium production dropped by 95 percent (UNODC, 2005, 2016, 2020b). The ban resulted in substantial hardship—and debt accumulation—for poppy growers at the time of the drop in production, but the effects were mostly transient. The ban ended by the next season—the Taliban fell from power in late 2001—and cultivation resumed despite efforts on the part of the newly installed government to curtail production: “The Taliban ban was harsh, effective, and short-lived” (Paoli, Greenfield, and Reuter, 2009, p. 4). Ironically, perhaps, one longer-term effect of the ban was

FIGURE 1
Afghanistan Dominates Global Opium Production



SOURCES: UNODC world drug reports and global illicit drug trends from years 2000 to 2020, reporting potential opium production (UNODC, undated, 2020b).

an incentive to increase cultivation afterward to pay back debt (Paoli, Greenfield, and Reuter, 2009).³ Since then, Afghanistan’s central government has struggled to maintain control over much of the country, even with the help of U.S. and international forces, and has not kept illegal cultivation in check.

Below, we discuss the role that opiates play in Afghanistan’s economy, with special consideration of their part in

the agricultural sector, and also, by way of revenue streams, their role in the country’s political landscape.

Opiates in the Afghan Economy

Recent data on opiates’ contributions to Afghanistan’s economy suggest the importance of opium production, processing, and trade to the overall economy and, espe-

cially, to farmers and laborers. But the data are hard to interpret, owing to a combination of market fluctuations and changes in methods of data collection and reporting.

In 2017, a boom year, the gross value of opiates to Afghanistan, from farm to border, was estimated to be between \$4.1 billion and \$6.6 billion, representing as much as 32 percent of the country's gross domestic product (GDP), of which farmers received about \$1.4 billion (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2018a, p. 5).⁴ The following year, when opium production fell by almost 30 percent and UNODC revised its estimation methods, the market was valued at about \$1.2 billion to \$2.2 billion, of which farmers received about \$600 million and then paid about \$270 million to laborers (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 3). This suggests that the nonfarm opiate activity, including illegal conversion to morphine or heroin for export, generated anywhere between \$600 million and \$1.6 billion that year. Overall, even in 2018, the opiate market might have been worth some 6 percent to 11 percent of the country's total GDP and more than the value of its "officially recorded licit exports of goods and services" (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 3).

As of 2018, opiate production—that is, poppy cultivation, opium extraction, and heroin manufacture—was estimated to account for anywhere between a third to half of the legal agricultural sector in the country (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 23)—but with substantial regional differences in prominence.⁵ Over the past decade, opium poppy cultivation has become concentrated in southern provinces, particularly in Nangarhar and Helmand, which

have been estimated to produce 60 percent to 75 percent of the country's opium (Greenfield et al., 2015, p. 18; Special Inspector General for Afghanistan Reconstruction, 2018). As recently as 2010, UNODC estimated that there were 250,000 households cultivating poppy nationwide.⁶ Today, the majority of crops are cultivated in the two southern provinces of Helmand and Kandahar (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2018b). In 2018, more than 90 percent of the villages in the south—an area dominated by Taliban forces, who no longer prohibit but rather profit from the drug trade (discussed below)—reported some opium poppy cultivation (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 25).⁷

In addition to supporting many farming households, opium poppy, which presents substantial advantages over many legal cash crops as a relatively high-value, compact, and nonperishable commodity, supports a large population of hired laborers from the south and beyond.⁸ Poppy must be sown, irrigated, weeded, and eventually harvested, largely by hand. At harvest, opium extraction requires laborers to walk from plant to plant, lancing individual pods and returning to collect the opium resin. In 2017, a historic year in terms of cultivation and yield, UNODC and the U.S. government, respectively, estimated that opium poppy employed between 354,000 and 590,000 full-time equivalent laborers (Byrd, 2017; Special Inspector General for Afghanistan Reconstruction, 2018).⁹ In 2018, a still productive but not peak year, UNODC estimated that poppy employed roughly 190,000 such laborers (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019).

Since opium poppy farmers generally trade in opium, a higher-value industry has built up to transform opium into morphine or heroin for illegal markets at home and abroad.

Given that farmers often rely on intermittent and part-time labor, the total number of individuals who draw income from poppy—either in cash or in kind—is likely much higher than the estimates cited above. Some describe economic spillovers, in part, because farmers purchase other inputs, such as fertilizer, pesticides, and farming tools, and invest in capital, such as irrigation pumps, solar panels, and, sometimes, tractors (Greenfield et al., 2015; Special Inspector General for Afghanistan Reconstruction, 2018). But farmers also invest more broadly across other sectors (see, e.g., Felbab-Brown, 2020).¹⁰

Opiates and the Political Landscape

Opiates also generate revenues for local leaders, police, and insurgents and other nonstate actors through various payments, ranging from tithes and other taxes on harvests to transportation and protection fees and outright extortion, but the data on revenue flows and links to recipients are weak and sometimes not comparable (Greenfield et al., 2015; Special Inspector General for Afghanistan Reconstruction, 2018).

UNODC estimated that opium taxes on harvests, excluding tithes, amounted to about \$29 million in 2018, of which \$18 million went to antigovernment groups, \$6 million went to local powerbrokers, \$3 million went specifically to the Taliban, and another \$3 million went to police, the poor, and government officials in equal measure (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, pp. 46–47).¹¹ In addition, traditional tithing on agriculture, irrespective of commodity, occurs throughout Afghanistan, with the Taliban and other antigovernment groups named as recipients in about 10 percent and 2 percent of all villages, respectively (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, pp. 47–48).

Since opium poppy farmers generally trade in opium, a higher-value industry has built up to transform opium into morphine or heroin for illegal markets at home and abroad, offering other funding streams to insurgents and other nonstate actors. Their income from all narcotics production, processing, and trade might be orders of magnitude higher than from harvest taxes, as other estimates suggest (Table 1). Looking at taxes alone and extrapolating from estimated harvest tax rates, UNODC then estimates that

TABLE 1
Recent Estimates of Taliban Earnings

Source of Income	Approximate Year of Estimate	Estimate	Reference
All sectors, including all narcotics ^a	2019	\$300 million to \$1.5 billion	UN Security Council, 2020
All narcotics	2018	\$400 million ^b	UN Security Council, 2019
All narcotics	2019	\$416 million	O'Donnell and Kahn, 2020a
All opiate taxes, including opium harvest taxes ^c	2018	\$5 to \$10 million	UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019
Opium harvest taxes	2018	\$3 million	UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019

^a *All narcotics* consists of all opiates (opium, morphine, and heroin) and nonopiate drugs, such as cannabis and methamphetamine.

^b UN Security Council (2019, p. 10) describes this figure as “stable” and cites the same or similar figures in the monitoring team’s 2018 and 2016 reports.

^c Opium harvest tax is solely farm level and does not include taxes on other opium trade and processing.

antigovernment groups, local powerbrokers, and the Taliban combined might have earned some \$50 to \$90 million from opiate taxes, including harvest taxes, in 2018—of which \$5 million to \$10 million would have accrued to the Taliban, specifically (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 46).

Looking more broadly at all drug-related activities, including those related to ephedra, methamphetamine, and cannabis, other reports cite Taliban revenues of some \$400 million a year in recent years, possibly amounting to a quarter or more of its total revenues (O'Donnell and Kahn, 2020a; UN Security Council, 2019; UN Security Council, 2020). The \$400 million figure and previous UNODC estimates are not directly comparable, because the UNODC estimates concern opiates and taxes alone, whereas the larger estimates include all drug-related activities and appear to include direct engagement in production, pro-

cessing, trading, and so on. Some of the same reports and others (e.g., Azami, 2018; O'Donnell and Kahn, 2020b) indicate that the Taliban’s revenue from drugs might be declining as a share of all its revenue. These reports point to the Taliban’s increasing diversification, including its success in mining, which, measured in terms of revenue, may be about as lucrative for the group as the drug trade.¹²

Given the illegality of opium production, processing, and trade, the central government likely derives little direct economic benefit from the activities, although it may collect taxes on legal supporting activities, such as input sales, and from other spillovers into the broader economy. Still, individuals linked to the government through employment or family ties may enjoy personal enrichment through bribes and protection schemes, a point we take up later when we consider the SMEs’ observations on the potential impacts of an opiate market collapse.

Why Could Fentanyl Displace Heroin from Afghanistan?

Fentanyl dates back about a half century. Some observers speculated early on that synthetic opioids would eventually supplant heroin, purely as a matter of supply-side factors: “The term ‘when’ rather than ‘if’ heroin substitutes appear is used intentionally, for this transformation seems economically inevitable” (Shulgin, 1975). Fentanyl and other synthetic opioids are not derived from opium poppy. For illegal producers, this is quite an advantage because fentanyl’s production is not beholden to geography or subject to drought and disease, but illegal producers can make it in laboratories from cheap chemicals in relatively low-cost, quick-turnaround operations, with minimal but specialized labor requirements and low visibility.

Fentanyl’s relative potency and compactness also present a market advantage over opium and its derivatives.¹³ Online vendors can ship as little as a few grams of pure fentanyl directly to buyers halfway around the world through ordinary postal or parcel delivery systems,¹⁴ while the equivalent amount of opium, morphine, or even heroin would be orders of magnitude larger—in weight and volume—than that of fentanyl and, thus, present greater risks of detection. An entrepreneurial drug dealer in Glasgow, Moscow, or Tehran may be lured by the ease and convenience of ordering fentanyl online. The low cost and high potency of fentanyl may also allow some dealers to stretch their inventory, mixing a little fentanyl into heroin to give it an extra kick to compete with rivals.

The heroin supply chain, on the other hand, consists of many links as opiates make their way from the opium

poppy field to the syringe (Kilmer and Reuter, 2009), incurring additional risk with each handoff.

Fentanyl can be obtained at a fraction of the cost of heroin and is priced accordingly at the wholesale level. By some estimates, the wholesale price of fentanyl adjusted for potency is perhaps 1 percent that of heroin (Pardo et al., 2019). All told, fentanyl represents an attractive alternative for drug producers and marketers who are looking to reduce their operating costs and risks. Therefore, apparent shifts from heroin to fentanyl have been driven largely by distributors and dealers, not consumers, and, when comparing the two drugs, it is hard to see how heroin can compete directly or indefinitely with this low-cost, high-potency alternative.

The global heroin market, however, remains relatively segmented with considerable differences in supply sources between North America, on the one hand, and Europe and Asia, on the other. The latter regions tend to source more of their opiates from Afghanistan than the former, but have, thus far, been experiencing less fentanyl displacement.

Displacement by fentanyl is already happening in major heroin markets in North America, with some parts of Canada and the United States seeing a drop in drug seizures and overdose deaths involving heroin but an increase in those involving synthetic opioids, such as fentanyl. Recent declines in opium production and somewhat dramatic drops in farm gate prices in Mexico, the principal source for heroin consumed in the United States (Drug Enforcement Administration, 2019), may be due partly to a shift toward fentanyl (Le Cour Grandmaison, Morris, and Smith, 2019; Office of National Drug Control Policy, 2020). Some researchers have noted a 50 to 80 percent decline in

Market segmentation may help explain why demand for Afghan opium poppy has not yet been affected by synthetic opioids.

Mexican farm gate prices in recent years (Le Cour Grandmaison, Morris, and Smith, 2019, pp. 17, 23).

By contrast, with a few exceptions, fentanyl is still largely absent from Europe and Asia, even though these regions have a higher share of the globe's opioid-using population. Markets in the Near and Middle East, South-west Asia, and South Asia are home to about 60 percent of global opiate users (UNODC, 2020a, p. 15), with varying degrees of immediate susceptibility to fentanyl (Taylor et al., 2021).¹⁵

Market segmentation may help explain why demand for Afghan opium poppy has not yet been affected by synthetic opioids. However, this segmentation may only slow the inevitable, as distribution networks are not impervious to reorientation or competition (Paoli, Greenfield, and Reuter, 2009), particularly in the context of opportunities and ease of marketing and trade made possible by the internet and cheap post. Europe and Asia may turn to fentanyl over time.

There is, however, no reliable way to project heroin's displacement over time or geography. For example, although displacement has been unfolding unevenly in North America since 2013, some markets completely transitioned from heroin to fentanyl in as few as two to three years (Pardo et al., 2019).

Potential Impacts of a Collapse in Demand for Afghan Opiates

Given the difficulty of predicting the time path of displacement, we consider two plausible time frames in which the bottom falls out of Afghanistan's opiate industry:¹⁶

1. a rapid transition of a few years or less
2. a more gradual transition that unfolds over several years or more.

Although we recognize that demand for Afghanistan's opiates might not evaporate entirely, as there may remain substantial cultural preferences for opium smoking and modest markets for plant-based derivatives, we consider these two paths as a scoping exercise.

Here, a *collapse* means that the demand for opiates that originate from Afghan opium poppy, such as heroin and morphine, *permanently* decreases to a point that poppy cultivation ceases to be viable for most Afghan growers and thus ceases to play a meaningful part in the local and national economies. This differs categorically from regular fluctuations in worldwide opiate demand and domestic poppy cultivation, which have affected farmers and laborers dramatically but have not resulted in the end of opium poppy cultivation.

Even the 2000–2001 Taliban ban, which was an extreme scenario in its own right, was a temporary phenomenon that was largely reversed the following year. Because the ban was short-lived and this collapse would be permanent, we hesitate to extrapolate from the event, except to observe that it inflicted serious hardship on those who lost income that year (Paoli, Greenfield, and Reuter, 2009) and to consider possible signaling effects. For example, in light of that experience, some farmers might mistake a sudden collapse brought on by fentanyl displacement for a temporary interruption, encouraging them to cultivate even more poppy in the short term, which could, in turn, further depress opium prices and rural incomes.

An enduring collapse in the opiate market would represent a dramatic hit to the national economy and the country's rural population and laborers, but, as we argue below, the effects would likely depend on the pace of change and the availability of alternatives. If the market were to unravel rapidly, resulting in a *sudden loss* of opium poppy cultivation, neither the country's economy nor its rural population and laborers would have much time to adjust, implying a potentially painful transition but possibly creating an opening for substantial political change. A more *gradual decline*, materializing over several years, would still entail economic losses, but it might allow for a softer landing, implying potentially less reverberation through the Afghan economy and, perhaps, fewer or different political consequences.

In the discussion that follows, we consider in more detail how individuals, groups, and the central government might fare under a rapid or gradual collapse and the means by which they might cope with the fallout. For a summary of our findings, see Table 2.

Impact on Livelihoods

Our analysis of the role of opiates in the Afghan economy suggests that a collapse in sales would have compromised economic security for a million or more Afghan farmers, workers, and others who benefit directly and indirectly from opiate production. The extent of their hardship would depend partly on how much and how quickly they can compensate the loss with other activities as the market unravels. Further, the effects would likely diverge across Afghanistan, with major poppy-producing regions, such as Helmand and other southern provinces, at greater risk.

Two SMEs viewed the loss from a rapid decline as a potential economic crisis with humanitarian implications, because so many rural Afghans rely on opium poppy for food security without ready alternatives, but another suggested that people would find something else to turn to for survival, even if their standards of living fell.¹⁷ Both perspectives hold credence inasmuch as conditions in Afghanistan might already be conducive to a crisis, but certainly not everyone would yield to it. Post-2011 reductions in U.S. and international military forces in Afghanistan, along with the emergence of COVID-19, might have weakened the Afghan economy and increased the country's vulnerability to an opiate shock, but past studies point to the resilience of a population that has been experiencing crises to varying degrees for generations (Greenfield et al., 2015; Crane and Greenfield, 2014).¹⁸

Some farmers might, as they have in the past, turn to income from off-farm employment as a near-term “coping strategy” (Greenfield et al., 2015, p. 72, citing UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2010, 2011). However, legal nonagricultural opportunities might be sparse in rural areas (Greenfield et al.,

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TABLE 2
Summary of Possible Impacts of Opiate Market Collapse Under Two Time Frames

Subject of Impact	Sudden Loss	Gradual Decline
Rural population	<p>Abrupt loss of opiate-derived income and wages, with limited opportunities for near-term adjustments—e.g., through off-farm work—could result in</p> <ul style="list-style-type: none"> • a possible humanitarian crisis, especially in the south • lower living standards, depending partly on recognition of need for and form or extent of rural and other development efforts^a • likely migration to urban areas or abroad. <p>Farmers and laborers could be expected to fill some gaps in income and wages eventually, through alternative legal, illegal, and unregulated means, but would make do however possible during a rapid transition, with the potential for support from crisis-motivated assistance or development efforts.</p>	<p>A steady decline in opiate-derived income and wages over an extended period, accompanied by a shift into legal, illegal, or unregulated alternatives, could result in</p> <ul style="list-style-type: none"> • lower living standards, depending partly on recognition of a need for and form or extent of rural and other development efforts^a • possible migration to urban areas or abroad. <p>Farmers and laborers could be expected to fill some gaps in income and wages as the transition unfolds, through alternative legal, illegal, or unregulated means, but need support from rural development efforts that might be unobvious absent the forcing event of a visible crisis.^b</p>
Local leaders, militia, and insurgents ^c	<p>Abrupt loss of substantial income and funding streams, with uncertain transition and outcomes, possibly leaving temporary leadership vacuums or resulting in power struggles and violence, could lead to or involve substantial realignments of political patronage groups.</p> <p>Actors who “remain standing” through transition could be expected to fill some gaps in income and funding streams eventually, through alternative legal, illegal, and unregulated means, making do however possible during a rapid transition.</p>	<p>Illegal income and funding streams could erode, with potential realignment of political patronage networks away from groups benefiting from the opiate market.</p> <p>Actors could be expected to fill some gaps in income and funding streams as transition unfolds, through alternative legal, illegal, or unregulated means.</p>

Table 2—Continued

Subject of Impact	Sudden Loss	Gradual Decline
Central government	<p>Little effect on immediate availability of tax revenues would be expected, but any such effect would likely be negative because of declines in legal activities that support or stem from opiate market. In the near term, the government could face expectations to address a possible humanitarian crisis and to mitigate impacts of a surge in internal migration (e.g., needs for crime control or expansion of services in cities); expectations, over time, would extend to addressing ongoing development needs. Absent additional fiscal resources, including foreign assistance, the government would be unlikely to meet expectations.</p> <p>The government may experience net loss or gain of revenue eventually, depending on the share of legal activities in the economy and the extent of losses to overall economy; it may also be able to formalize other sectors of the economy that become attractive to former opiate laborers.</p>	<p>Potential exists for negative and positive effects on tax revenue as the transition unfolds, because of simultaneous declines in legal activities that support or stem from opiate market and shifts into legal activities. Over time, the government could face expectations to mitigate the impacts of a tendency toward internal migration (e.g., needs for crime control or expansion of services in cities) and to address ongoing development needs, if visible. Absent additional fiscal resources, including foreign assistance, the government would be unlikely to meet expectations.</p> <p>The government may experience net loss or gain of revenue during and after the transition, depending on the share of legal activities in the economy and extent of losses to the overall economy. The government may also be able to formalize other sectors of the economy that become attractive to former opiate laborers.</p>

^a Rural and other development efforts might be more efficacious under a slow, steady transition and in a planned process than during a crisis, but the need for such efforts might be less obvious, and assistance might not materialize, absent the crisis.

^b A gradual transition could also manifest with *lumpiness*, as a series of moments when farmers and others cross thresholds beyond which they can no longer rely on opium for income or wages, meaning that they must pivot out of the opiate market and into other pursuits. In a modeling sense, it might be the moment when a farmer, for example, crosses a break-even point on opium cultivation.

^c Although local leaders, militia, and insurgents differ greatly, we have placed them in a single row because the differences between a sudden loss of the opiate market and a gradual decline could play out similarly for each in broad terms, if to varying degrees. For example, we might expect greater risk of violence among insurgents and militia than among local village leaders.

2015, p. 89), and farmers might find themselves in competition with others losing income concurrently, especially in rural areas in the south, where poppy was a leading crop.¹⁹ Among the potentially displaced, we would include not just those who work in opium poppy fields, year-round or at harvest, but also those who supply farming inputs, for instance, in the form of fertilizer, pesticides, and farming tools, or engage less directly.

That said, Afghan workers often take part in a range of economic activities and might look to these alternatives, such as transportation and construction, to survive

a collapse (Crane and Greenfield, 2014, p. 272). One SME pointed to public-sector options, mentioning that the government's demand for Afghan security forces—army and police—has consistently exceeded recruitment (Dobbins et al., 2020). However, the gap amounts to perhaps tens of thousands of jobs, representing a mere fraction of the labor dedicated to opium poppy.

Whether a rapid collapse would precipitate an outright crisis is an open question, but some measure of immediate assistance, coupled with a longer-term strategy for rural development could, respectively, stave off hardship and

enable an eventual transition to other agricultural pursuits for at least some rural households and laborers.

In their report, Greenfield and coauthors suggest that, relevant to a transition, rural development programs that emphasize supports for traditional agricultural products, improvements in product quality and grading, and stronger linkages between farmers and markets hold promise and might facilitate a shift toward legal crops. Admittedly, past efforts to encourage so-called crop substitution have met with little success (Greenfield et al., 2015), but if demand for Afghanistan's opium poppy collapsed, the alternatives to poppy would undoubtedly look better. Farmers' and laborers' standards of living might decline absent poppy, but some might adopt the alternatives and continue to participate in or return to agriculture.

If the collapse were gradual, a crisis would be far less likely, but efforts to promote rural development might still be needed. Those efforts would, by definition, have more time to unfold, potentially allowing for a smoother transition from opium poppy to other agricultural pursuits. The outcome for farmers, laborers, and others who now benefit from poppy cultivation might also depend on whether policymakers recognize the need for support and could garner the resources, absent the forcing event of a visible crisis.

Two SMEs familiar with the security situation in Afghanistan noted that a collapse in the opiate market could lead to greater internal migration to urban areas that could absorb some job seekers, but it might also depress wages in positions that require little training or few skills. This movement toward cities would be in line with past waves of rural-urban migration in Afghanistan in which economic hardship, often precipitated by ongoing conflict, and perceived urban opportunities were cited among

the main drivers (Jackson, 2009; Couldrey and Herson, 2014; Marchand et al., 2014), but this movement could be larger and faster, depending on the tempo of the collapse. Such migration could result in Afghanistan's population becoming more concentrated in urban areas, which could entail challenges of its own relating to absorptive capacity, social and ethnic discord, and safety. Both of those SMEs added that, particularly if the situation were severe, some rural laborers might also seek opportunities abroad, leading to a spike in emigration (to Pakistan, Iran, Europe, and elsewhere) and remittances, which in 2019 amounted to just over 4 percent of Afghanistan's GDP (World Bank, undated).

The SMEs agreed that illegal or unregulated activities would also play an important part in any transition, given limitations on legal opportunities. Some of the options cited included alternative drug production, unsanctioned mining, smuggling, and petty or other unorganized crime, as well as joining an insurgent group, which might pay better than a security job. Two SMEs suggested that the central government might be able to take steps to regularize the mining industry so that at least some currently unsanctioned activities could fall under a legal regime.

In addition, other crops that can serve illegal markets might hold promise.

Cannabis, which has a long history of cultivation in Afghanistan, could present an alternative for some poppy farmers or laborers. One SME knowledgeable with illegal economies recalled the 2010 poppy blight and a concomitant increase in trafficking cannabis as indicating a possible transition opportunity. The SME noted that some southern farmers already grow cannabis, suggesting potential viability and local marketability.

It is unlikely that Afghanistan would shift substantially toward synthetic drug production in any manner that could effectively compete internationally or in ways that could absorb a substantial share of the opiate labor supply.

Ephedra, a shrub that can be harvested for a variety of medicinal products, has gained recent attention in Afghanistan as a burgeoning source of methamphetamine, although methamphetamine production appears to be occurring through use of chemical precursors (Mansfield, Organisation for Sustainable Development and Research, and Soderholm, 2019; Mansfield and Soderholm, 2019; *The Economist*, 2019; Special Inspector General for Afghanistan Reconstruction, 2019; International Narcotics Control Board, 2018; UN Security Council, 2020). However, two SMEs expressed skepticism that substitution from opium poppy to ephedra would be easy, given the differences between the two crops and the surrounding economic activities. So far, ephedra harvesting has been concentrated primarily in provinces without much poppy cultivation and has revolved around the exploitation of wild plants. Whether ephedra has major commercial potential is uncertain, especially given the ubiquity of synthetic alternatives.

Other illegal drugs could play a small part too.

Theoretically, the production of potent synthetic opioids or increased synthesis of methamphetamine using precursor chemicals also represents an alternative in the country because of the weak institutional control over access to precursors. However, it is unlikely that Afghanistan would shift substantially toward synthetic drug production in any manner that could effectively compete internationally or in ways that could absorb a substantial share of the opiate labor supply.²⁰ The established illegal drug industries in China, Southeast Asia, and India have the substantial advantage of already having the required technical skills and access to large quantities of precursor chemicals. Nevertheless, a growing cottage methamphetamine industry in Afghanistan may be a possibility.

A collapse of the opiate market would also affect individuals involved in later stages of the supply chain, albeit the number of people engaged in processing opium into morphine or heroin or smuggling it out of Afghanistan is smaller than the number involved in the sector that grows poppy. As one SME pointed out, much of the heroin manu-

facturing and trafficking in Afghanistan occurs in small-scale operations, as indicated by the size of laboratories that are typically dismantled. The distribution of revenue from opium and morphine trade or heroin manufacturing is skewed, with a relatively high number of participants with low earnings and a relatively few with high earnings. A decline in opium and heroin sales, however, would place small-scale manufacturers in a similar predicament to farmers—i.e., without an obvious, immediately available alternative that would generate a similar income.

Impact on Political Actors and Institutions

As was true for farmers and laborers, at least some political actors would incur substantial losses from an opiate market collapse, but the extent of their “pain,” including any threat to their existence, could also depend on the pace of change and availability of alternatives. Overall, a collapse would likely weaken local powerbrokers, the Taliban, and other antigovernment groups. This could be to the advantage of the central government, which might be better positioned to weather the loss given that it relies on many other revenue streams, including foreign funding. However, Kabul may need to address a possible humanitarian crisis, a surge in urbanization, and risks of political instability and violence in a rapid collapse scenario.

In the event of a rapid collapse, some local powerbrokers could lose much of their annual earnings without immediate prospect of a substitute revenue stream.²¹ Such actors include local leaders with or without formal ties to the central government, as well as local militias that are not formally linked to the central government but are not hostile to it. According to one SME, it is reasonable to

expect local leaders and militias to attempt to increase their extortion efforts to replace the lost revenue, though this would be unlikely to close the gap, especially in the near term. Another SME also suggested that the loss of income among local powerbrokers could increase their responsiveness to the central government. Depending partly on the distribution of effects, the presumed jolt could also have ramifications for internal governance and stability, as the individuals and groups might compete or jockey for dwindling revenues or power. With a more gradual decline, one might imagine considerably less turbulence, with less prospect for competition, infighting, or substantial changes in power structures.

Along similar lines, insurgent groups might feel the loss differently, in relation to both the pace of change and the distribution of effects within and among them.

Regarding the pace of change, the Taliban has been reported to derive some \$400 million a year or upward of a quarter of its total revenue from illegal drugs (Table 1) and, if the opiate market collapsed, might look to replace much of that figure. Even if the Taliban has been taking in a large and increasing share of its income from other activities that do not involve opiates, including mining (see, e.g., Azami, 2018; O’Donnell and Kahn, 2020b; UN Security Council, 2019, 2020), filling the revenue gap could still represent a heavy lift in just a few years. With more time to adjust, under a gradual decline, the Taliban might have less difficulty filling the gap.

As for the distribution of effects, not all Taliban segments would feel the loss in equal proportion, whether occurring quickly or slowly. One SME familiar with the security situation noted that there are internal divisions within the Taliban and added that different *shuras* (or

leadership groups) would be affected disproportionately by a collapse (see also Allen, 2020). For example, the Quetta Shura, the traditional, most powerful Taliban faction, is dominant in the south and thus derives a comparatively higher share of its income from opium, suggesting that it may be highly affected by a collapse. By contrast, other factions, such as the Peshawar Shura, have a different mix of funding sources and may be notably less affected. The SME suggested that varying effects from the collapse of the opiate market could create more fractures within the Taliban, which could be favorable to the central government.

Other insurgent groups would likely be much less affected regardless of the pace of change, because of their minimal involvement with opium production or trade. Some of the SMEs pointed out that the Islamic State of Iraq and Syria (ISIS), which is a comparatively small group in Afghanistan, is generally opposed to trade in narcotics and that al Qaeda's ability to draw income from opium is hampered by its lack of territorial control. According to UNODC, ISIS might have earned as little as \$7,000 from

opiate taxes in 2018 (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019).

Overall, the loss of opiate revenues for insurgent or other antigovernment groups could be beneficial to the central government if those groups lose strength in relation to the central government, but the government's prospects are highly uncertain.

The central government would not lose any tax revenue from opium production, processing, and trade, in either a rapid or gradual market collapse, because the activities are illegal, but it might still feel the collapse indirectly. As one SME familiar with the political situation pointed out, opium revenue does not make its way to the central government's coffers but rather stays with local powerbrokers and other individuals linked to the government, suggesting a possible upside from less corruption among those ranks. However, the government could lose revenue from taxable economic activity that drops off concurrently. The ultimate effects on tax revenue are hard to predict, because an eventual shift out of opiates and into legal or regulated activities could still imply a larger overall tax base.

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If supported by international donors, a meaningful relief effort led by the central government might improve the government's standing among the population and its strategic position against other nonstate actors.

Whether, on balance, a larger share of a smaller taxable pie would mean more tax revenue or less remains to be seen.

Whereas the central government might see little change in the resources at its immediate disposal, or even a near-term decline, it could have a pressing need for additional funds.

The reduction in farmers' and laborers' income could put pressure on the authorities to respond, especially if those losses were abrupt and severe enough to cause a humanitarian crisis and drive a substantial share of the rural populace to urban centers. The government would then be facing not just a rural crisis but also the challenges of accelerated urbanization, including attendant needs for crime control or expanded services. The central government is highly unlikely to have adequate resources to meet such challenges on its own, even with additional tax revenues. However, if supported by international donors, a meaningful relief effort led by the central government might improve the government's standing among the population and, relatedly, its strategic position against other nonstate actors. A gradual collapse might also strain Afghanistan's cities but would require less imme-

diately absorptive capacity and entail less jarring social adjustments.

Three SMEs raised the possibility that international donors might step up to soften the blow of the lost income from the opiate market, but at about 6 percent to 11 percent of GDP, that gap would represent about 25 percent to 50 percent of recent annual assistance from international donors (Organisation for Economic Co-operation and Development, 2020). Apart from creating a humanitarian need, a reduction in drug trafficking and corruption could plausibly lead to an increase or decrease in foreign engagement. One SME thought that it might make Afghanistan a more enticing destination for international aid and investment, and another pointed out that less need for counter-narcotic efforts might *decrease* the interest of some donors. Offering still less cause for optimism, another SME added that sustained international funding likely depends on a continuous international military presence and, rather than seeing an increase in international funding, any increased donor interest may be more likely to manifest as a slowdown in aid. Others remind us that increases in political uncertainty can lead to capital flight (Crane and Greenfield, 2014, pp. 274–275).

One SME added that the central government may face indirect losses—to power, not to financing—if its local allies can no longer serve as effective providers of security. Notwithstanding the challenges of accelerated urbanization, another SME suggested that migration to the country's urban centers could help the central government strengthen the security of the citizenry insofar as the shift removes rural populations from close proximity to insurgent groups (Hack, 1999, 2009; Burton and Nagl, 2008).

Where might these competing forces leave the political landscape?

A collapse of the opiate market, especially a rapid one, could weaken local powerbrokers, the Taliban, and other antigovernment groups, thus helping the central government, but it could also entail a humanitarian crisis, a surge in urbanization, and risks of political instability and violence, any or all of which could create needs for foreign assistance or security interventions. The SMEs were divided in their views on the Taliban's financial and political resilience, but the disruption from a rapid collapse could create an opening for the government. By contrast, a gradual decline might be less likely to result in a rural—or urban—crisis or contribute to political instability and violence, but it might also present less opportunity for significant change. This of course depends on the ongoing and fluid political situation unfolding during a U.S. military withdrawal that is likely to affect the current power structures

Conclusion

The loss of demand for Afghan opiates could have significant impacts on economic and political conditions, depending largely on the pace of change.

Farmers, laborers, processors, and other individuals who engage directly with the opiate market face the highest risk. A rapid collapse of the Afghan opiate market could result in a humanitarian crisis, as the most-vulnerable individuals would face precarious economic conditions and food insecurity. A collapse could also lead to a surge in rural-to-urban migration within Afghanistan, as well as emigration. Other economic sectors, both legal and illegal, would be hard-pressed to absorb all those affected by the collapse, without substantial deprivation. Although a rapid collapse could be disastrous for many rural households and laborers, the central government could benefit, at least temporarily, from a rebalancing of power among local leaders and insurgents brought about by declining revenue flows to those individuals or groups—but with considerable uncertainty. Because Afghanistan's revenues from opiates fuel corruption and insurgency, perhaps the loss of those revenues could help to reduce both. However, any gains to the central government may depend on its ability to manage an economic crisis, challenges of accelerated urbanization, and the potential for instability and violence simultaneously, with few financial and institutional resources.

A more gradual decline in demand for Afghan opiates could ease the transition by giving Afghan households and the economy more time to adjust, but it might still result in lower living standards in an already-poor country and add to migratory pressures.

A hasty end to opiates in Afghanistan, albeit seemingly appealing, might be harder to bear—and require more financial and political support sooner—than a slow retreat.

Although Afghanistan's citizens have demonstrated resilience and flexibility in finding ways to support themselves, the international community and authorities in Kabul should prepare for the effects of an opiate market collapse and identify effective ways to respond to a possible crisis. If a crisis occurs, Afghanistan might need heightened foreign assistance for humanitarian purposes and, depending on the extent of any instability and violence, support for its security forces. Even under a gradual transition, the central government could need help implementing rural development programs and improving crime control and services in urban areas.

With those possibilities in mind, we suggest that policymakers maintain a watchful eye on fentanyl's progress across Europe and Asia, monitoring heroin markets for signs of encroachment, and begin to consider strategies

for responding, if and when need arises. To our thinking, the goal would be to create an early warning system, drawing on evidence of fentanyl taking hold in destination markets, as this is likely to offer the earliest signs of a shift in production with potentially important upstream consequences. Evidence of opiate market pricing or other market trends in Afghanistan, on its own, might not capture the shift toward fentanyl in real time. However, in combination, this early warning system alongside Afghan opiate market indicators could be used to develop thresholds for implementing a well-targeted and rapid response, gauged to the apparent pace of change. The response should include not just immediate mitigation measures but also a longer-term plan to encourage rural development and address concerns about inevitable urban migration.

Arguably, sustained efforts to promote rural development in advance of any early warning would have benefit in their own right (Greenfield et al., 2015) and as a precautionary measure, even if they might have little effect on farmers' decisions to grow opium poppy. Expanding legal opportunities in rural areas could also serve to limit growth in other activities, such as cannabis, ephedra, or methamphetamine production, that can serve illegal markets.

Certainly, the suggestion of a “well-targeted” response that can react rapidly to an impending crisis, coupled with a plan for sustained development assistance, is no small order, given the challenges of past development efforts and mounting pressure for the United States to disengage from Afghanistan. But, without any forethought, the challenges will be that much greater. A hasty end to opiates in Afghanistan, albeit seemingly appealing, might be harder to bear—and require more financial and political support sooner—than a slow retreat.

Notes

¹ In addition to that earlier work by the authors (e.g., Paoli, Greenfield, and Reuter, 2009; Crane and Greenfield, 2014; Greenfield, Bond, and Crane, 2017; Greenfield et al., 2015; Pardo et al., 2019; Pardo, 2018; Pardo, Davis, and Moore, 2019; Reuter, Pardo, and Taylor, 2021), this Perspective is a companion to published research, building on interviews and secondary-data analysis that explored similar scenarios of fentanyl's encroachment in other major heroin-producing or -consuming regions in Asia and Oceania (Taylor et al., 2021). Given Afghanistan's dominant role in opium poppy cultivation and eventual heroin production, we augmented earlier research with five semistructured interviews with SMEs from national and international organizations who focus on Afghanistan's security, politics, and economics, including illegal activities. Discussion points in the interview protocol included illegal economies, security, heroin production, and political developments in the country. We also analyzed recent illegal drug production and economic data for Afghanistan from the U.S. government, UN organizations, and other sources to inform measures of the country's opiate market.

² At the time of this writing, the newly inaugurated Joseph Biden administration was advocating an accelerated peace process, the outcome of which was highly uncertain. Given the extent of that uncertainty, we chose not to speculate on the implications of either a market collapse on that process or the peace process on our analysis. In the interim, the administration has announced its plan for withdrawing U.S. troops in 2021. Our analysis concluded at the end of 2020, just prior to the shifting political landscape and a possible Taliban resurgence.

³ In addition, it took more than a season for prices to settle down, but that was due partly to political conditions. For a detailed discussion of the effects of the ban on market prices and the difficulty of reaching a new market equilibrium amid ongoing turmoil, see Paoli, Greenfield, and Reuter (2009).

⁴ We attribute value to supply-side activities in Afghanistan's opiate market, including opium production, opiate processing, and opiate trade, all of which are illegal in this context. All amounts of revenue, income, financial returns, and so on presented in this Perspective are in nominal U.S. dollars.

⁵ However, this estimate does not account for the implicit value of subsistence agricultural activity.

⁶ At that time, about half of all households in the south cultivated some opium poppy (Greenfield et al., 2015, p. 10). UNODC stopped releasing estimates of households involved in poppy cultivation after 2011.

⁷ Expansion of poppy cultivation has contributed to inward migration and the cultivation of some 330,000 hectares of desert land in the southwest of the country (Special Inspector General for Afghanistan Reconstruction, 2018).

⁸ Harvests fluctuate substantially from year to year, but opium still is generally more profitable than many legal cash crops, can be easier and safer to market, and can serve as a store of value and informal currency (e.g., Greenfield et al., 2015; Special Inspector General for Afghanistan Reconstruction, 2018). Once extracted, opium is durable and relatively compact, making it highly storable, transportable, and tradable. In areas without good roads or refrigeration, moving a small volume of nonperishable opium can be less precarious than moving a large volume of fragile melons, pomegranates, or other crops that might be competitive with opium. Traders purchase opium at local markets or, more so than other crops, at the farm gate, saving farmers a potentially dangerous trip. In a recent survey, about 30 percent of opium farmers reported direct sales, compared with 13 percent of wheat farmers (UNODC and Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 5). This is not to say that opium poppy is always preferable to other cash crops—some legal cash crops can and have outperformed poppy (Greenfield et al., 2015)—but that poppy often holds relative appeal.

⁹ Although an imperfect comparison, this could amount to about 4 percent to 6 percent of adult Afghan males, according to current population estimates (Central Intelligence Agency, 2021). The measure is imperfect because a *full-time equivalent* is not an actual laborer, children also work in fields, and many Afghan citizens reside outside Afghanistan. Moreover, many poor Pakistanis, many of the same ethnicity as their Afghan neighbors, migrate to work in Afghanistan during the opium growing season, especially at harvest.

¹⁰ Felbab-Brown (2020), referring to UNODC's 6 percent to 11 percent figure, looks to the rest of the economy and offers this observation: "But when one takes into account economic spillovers, with drugs underpinning much of the other legal economic activity (such as construction and the purchases of both durables and non-durables), drugs easily constitute a much larger portion of the Afghan economy."

¹¹ Village leaders report on recipients without further information, suggesting that the delineation *antigovernment groups* could also include some payments to the Taliban or other insurgent groups (UNODC and

Islamic Republic of Afghanistan Ministry of Counter Narcotics, 2019, p. 46).

¹² O'Donnell and Kahn (2020b) report that there is about as much recent income from mining as from drugs.

¹³ Fentanyl is about 25 times more potent than heroin in terms of morphine equivalent doses. Here, we note some irony in that opium's compactness in relation to other legal cash crops has contributed to its success in the agricultural sector, but its bulkiness in relation to synthetic alternatives, such as fentanyl, may contribute to its demise.

¹⁴ Ten grams of nearly pure fentanyl, which is a little more than two teaspoons of powder, could amount to thousands of individual doses.

¹⁵ In Taylor et al. (2021), the authors examine four major opiate markets in parts of Asia and the Pacific that are, in part, supplied by heroin from Afghanistan, noting that China and India are less at risk for fentanyl's introduction. The authors did not assess other major opiate markets that are supplied exclusively by Afghanistan, including those in Iran, Russia, and Europe. Those markets may have greater risk factors, including higher rates of injection drug use and internet connectivity.

¹⁶ For these purposes, we do not state a specific start date for the collapse.

¹⁷ Given our assessment of the prominence of opiates in Afghanistan's economy, it is unsurprising that all five SMEs thought that a rapid market collapse would constitute a major economic shock. Moreover, if opiates were no longer leaving Afghanistan, generating export revenues for domestic actors, the country would experience a drop in its imports of legal goods and services (Crane and Greenfield, 2014, pp. 272–274), making it harder for Afghan residents to acquire products that might range from machinery to medicine.

¹⁸ Despite rapid economic growth in the decade after 2001, since 2012, Afghanistan's GDP has remained nearly flat at just around \$20 billion a year (World Bank, undated). Thomas (2019, pp. 9–10) provides a detailed chronology of the drawdown in U.S. troops, which began toward the end of 2011; whereas “[t]he size of the NATO-led military presence in Afghanistan peaked at around 130,000 international troops, of which nearly 100,000 were American, between 2010 and 2012,” U.S. force levels may have been between 11,000 and 15,000 in 2017. Lacking any official U.S. troop data after 2017, Thomas (2019, p. 8) reports that the combined level of NATO and non-NATO forces in 2019 was about 17,100, of which 8,475 were American. Thomas (2020, p. 15) and others attribute economic decline in Afghanistan to the troop withdrawals and comment on further damages from COVID-19. The withdrawal of troops might be tied to an economic decline through reductions in spending and security.

¹⁹ In the past, farmers have turned to off-farm employment (Greenfield et al., 2015, p. 72, citing UNODC, 2010, 2011), but with the expectation that opiates would rebound in the not-too-distant future.

²⁰ Methamphetamine production requires relatively little labor and a different skill set from poppy cultivation, suggesting relatively few job opportunities for those that were once employed in the poppy fields.

²¹ Here, we define local *powerbrokers* as individuals or groups operating subnationally and specifically exclude the Taliban and other antigovernment groups.

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About the Authors

Victoria A. Greenfield is a senior economist at the RAND Corporation. She specializes in national security and international social and economic issues, including transnational crime. She has a Ph.D. in agricultural and resource economics.

Bryce Pardo is a policy researcher at the RAND Corporation. His work focuses on drug policy, with a particular interest in the areas of cannabis regulation, opioid control, and new psychoactive substance markets. He has a Ph.D. in public policy.

Jirka Taylor is a policy analyst at the RAND Corporation. His research helps inform policy and practice in the fields of drugs, social justice, and criminal justice. He has an M.Phil. in international relations and an M.A. in American studies.

About This Perspective

This Perspective summarizes the current role that opiates play in Afghanistan's economy and political landscape and discusses the potential impacts of their disappearance. Afghanistan is the world's largest producer of illegal opium poppy and is a key source for heroin markets across Europe and Asia. For decades, illegal opiates have helped sustain farmers and workers in rural Afghanistan while funding nonstate actors and insurgent groups. Given the rise and dominance of fentanyl and other synthetic opioids as they displace heroin in major drug markets in the Americas, we assess what might happen to Afghanistan if demand for its opiates dropped off sharply and permanently. A rapid collapse in the opiate market in Afghanistan could have devastating effects on rural populations and be disruptive to other sectors and actors in the economy. A more gradual decline in demand for Afghan opiates could ease the transition by giving Afghan households and the economy more time to adjust, but it might still result in lower living standards in an already-poor country and add to migratory pressures. This Perspective, aimed at individuals in the international policy community, including U.S. policymakers, who track conditions in Afghanistan and are concerned about its future, discusses how a collapse of the market for Afghan opiates could unfold and what role the international community may need to play should it occur.

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