1. Introduction to the *Research Handbook on Economic Sanctions*

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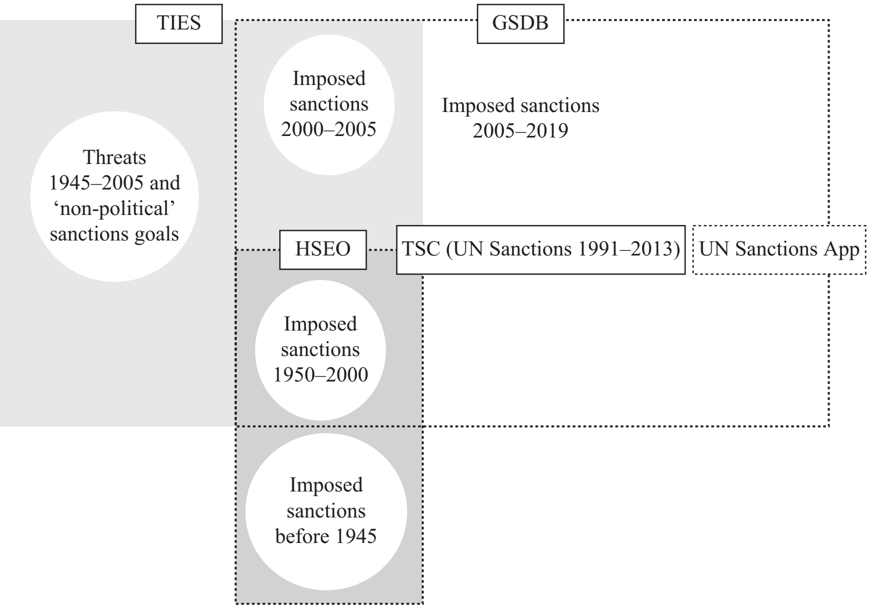
1.1 THE EXPANDING UNIVERSE OF SANCTION KNOWLEDGE

The contributions to this *Handbook* demonstrate that the breadth and depth of research on economic sanctions are expanding faster than ever before—with major implications for theory and policy. This *Handbook* shows that several of the divides that characterize the research on economic sanctions are being bridged. The *Handbook* brings together the two disciplines that study sanctions but often talk past each other: Economics and Political Science/International Relations. Moreover, both Political Science and Economics are crossing the bridge between quantitative and qualitative approaches, but from opposite sides. In the early years of sanctions research (i.e., back in the 1950s–1970s), the analysis of sanctions was dominated by qualitative case studies and descriptive statistics. Some analysts in that embryonic stage already tried to glean general lessons from (selected) collections of cases (Wallensteen, 1968, is an example). Initially, only a handful of cases was available but as sanctions were used more often, the sample increased. The breakthrough in the analysis of economic sanctions came with *Economic Sanctions Reconsidered*, the seminal data collection and analysis developed by Gary Hufbauer and Jeffrey Schott at the Peterson Institute. *Economic Sanctions Reconsidered* enabled analysis to be based on a large sample size and that helped to reduce an important source of selection bias apparent in the earlier narrative accounts of sanction failures and successes. Throughout the 35 years since its first publication in 1985, the Peterson Institute's sanction case collection has inevitably received a lot of criticism on the measurement of success, selection bias, and estimation method.[2] However, the main point should not be overlooked here: *Economic Sanctions Reconsidered* was a major scientific improvement that helped to address the major weaknesses of the existing literature of the 1980s.

The universe of sanctions data expanded further when sanction threats were included in the Threat and Imposition of Economic Sanctions (TIES) project run by T. Clifton Morgan, Navin Bapat, Yoshiharu Kobayashi, and Valentin Krustev. That data set was constructed not so much to provide a more up-to-date overview but rather to bring new threats and uncertainties into the equation since new theories required different data. In 2020 Gabriel J. Felbermayr, Aleksandra Kirilakha, Constantinos Syropoulos, Erdal Yalcin, and Yoto Yotov at the Kiel Institute for the World Economy published the Global Sanctions Data Base, enabling research on the trade impact of sanctions. The sample of sanctions cases was expanded significantly and presently also covers the period of the Trump administration. Diagram 1.1 shows how these three projects relate and partially overlap. It suggests that results may be sensitive to the specific data set used (and even which vintage of that data set was used). The emergence of specialized large-*N* sources such as the UN targeted data set developed by Thomas Biersteker, Sue Eckert, Marcos Tourinho, and Zuzana Hudáková enriched our knowledge further *and* added to this data complexity. The research teams



Notes: GSDB = Global Sanctions Data Base (Felbermayr et al., 2020 and Chapter 4 of this Handbook).
HSEO = Economic Sanctions Reconsidered (Hufbauer et al., 2007).
TIES = Threats and Impositions of Economic Sanctions (Morgan et al., 2014).
TSC = Targeted Sanctions Consortium (Biersteker et al., 2018).
UN = SanctionsApp (Biersteker et al., 2020).

Diagram 1.1 Relationships and overlaps between the large-N data sets

themselves in Part I of this *Handbook* discuss this expanding universe of sanctions data. Soon Big Data and 'nowcasting' will enable tracking of the impact of sanctions on groups of individuals and goods, and often in real time. More and better data hold great promise for future research as it offers strong incentives for both new research and its replication (i.e., testing if findings of the established research also hold for different data sets). Irina Mirkina's contribution to this *Handbook* is a best practice methodology for investigating the robustness of our knowledge.

The expansion of the literature is also increasing the need for research synthesis. Hence, readers will appreciate excellent reviews that provide coherent overviews of what we (already) know and what we (still) want to know. In particular, the reviews on sanction mechanisms in this *Handbook* show how qualitative, formal, and empirical knowledge can be combined to understand and appreciate the scientific body of knowledge on economic sanctions. Dennis Halcoussis, Bill Kaempfer, and Tony Lowenberg review the Public Choice theory of economic sanctions. Bryan Early discusses research on sanction implementation and ways to improve compliance and impact. Dursun Peksen, in turn, examines the related complex relationships between sanctions and political developments. A further effort regarding research synthesis is provided by the first meta-analysis on economic sanctions co-authored with Binyam Demena, Alemayehu Reta, Gabriela Benalcazar Jativa, and Patrick Kimararungu. It cogently demonstrates that, by now, enough empirical primary studies exist for useful generalization.

Table 1.1 Overview of case studies by target in this Handbook

Country	Chapter
Cuba	19
Iran	17, 18, 19
North Korea	11
Russia	13, 19
Turkey	19

Meta-analysis holds promise for a better understanding of the heterogeneity of findings controlling for methodological study characteristics.

It is true that economists have for quite a long time tended to treat economic sanctions—like other forms of disrupted trade—as a somewhat marginal topic. But the tides may have turned (Nitsch and Besedeš, 2019), as illustrated by the increased interest in measuring the impact of sanctions on international economic flows. This literature that starts with Caruso (2003) offers a new important avenue in view of the field's original focus on effectiveness (i.e., the ability to change the target's behavior). Using advanced gravity models, Tristan Kohl investigates the impact of lifting sanctions and Mian Dai, Gabriel J. Felbermayr, Aleksandra Kirilakha, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov deal with the issue of the dynamics of sanction impact.[3] Matěj Bělín and Jan Hanousek pioneer an alternative hybrid approach of a Vector Autoregressive model with differences-in-differences that—additionally—offers a tool to test the occurrence of structural breaks that could pinpoint when sanctions start to bite in the trade data (if at all). Economists have also grown much more aware of the hidden costs of economic sanctions in relation to health, poverty, and, as discussed by Sylvanus Kwaku Afesorgbor, food security.

In addition to the analyses and findings from the large-*N* world, this *Handbook* presents advanced case studies that stand out because they develop and innovatively apply advanced methodologies in an empirically relevant context, potentially bridging the divide between quantitative and qualitative research Table 1.1. Baran Han develops a game-theoretic model of secondary sanctions against North Korea. Sajjad Faraji Dizaji uses stochastic frontier analysis to investigate the impact of the imposition and lifting of sanctions on the efficiency of the Iranian financial sector. Bader Sabtan, Marc Kilgour, and Rami Kinsara use their graph model for conflict resolution to visualize the conflict over the Iran nuclear deal. This move toward specific cases in a sense reflects dissatisfaction with the fact that large-*N* analysis by its nature does not allow for the inclusion of case-specific mechanisms and qualitative details that reflect conditions of time and place.

The use of case studies as a tool to develop empirical methodologies does not undermine the importance of qualitative work. Michal Onderco and Reinout A. van der Veer argue the case for small-*N* research in order to know more about the motivations of firms that are key to both compliance, adjustment, and resilience. In turn, qualitative work does not exclude quantitative follow up as shown by Julia Grauvogel's Qualitative Comparative Analysis that synthesizes case-based information related to 75 sanctions regimes in sub-Saharan Africa. Transparent research synthesis methods that analyze comprehensive sets of primary studies (identified with systematic reviews) will become increasingly important to understand what we know in an expanding and often contradictory universe of sanctions knowledge.

Table 1.2 Overview of applied methodologies in this Handbook

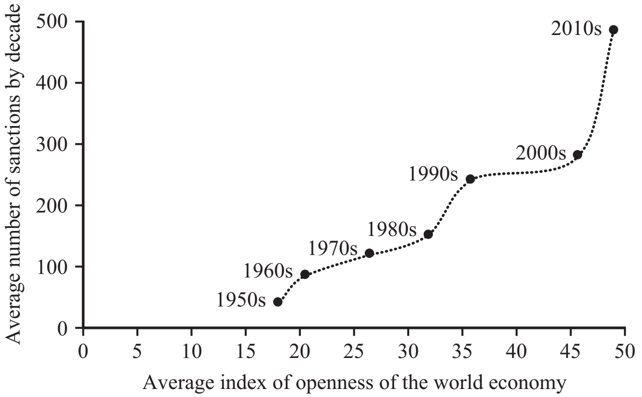
Subject and method	Chapter
Descriptive statistics	4, 5
Discourse analysis	1
Game theory	11, 17
Impact of sanctions	
- Common correlated effects	20
- Gravity model	21, 22
- Entropy balancing	23
- Hybrid VAR and differences-in-differences	13
- Stochastic frontier analysis	18
- Synthetic Control Method	20
Research synergy	
- Comparative qualitative analysis	10
- Meta-analysis	6
- Narrative review of literature	3, 7, 8, 9, 12, 16, 19, 20
Review of case law and policies	2, 14, 15

Using complex numerical evaluations, such as Qualitative Comparative Analysis or Meta-Regression Analysis is, however, not a panacea. Therefore, the contributors themselves warn that a sound understanding of the underlying literature remains the basis. Traditional narrative reviews can deal with heterogeneous findings based on numerical and non-numerical findings.[4] Traditional narrative analyses will also remain important to understand the legal context and to recognize new emerging sanctions applications. The *Handbook* provides four excellent examples of the utility of such overviews. Maarten Smeets reviews the World Trade Organization (WTO) case law. Clara Portela analyzes the withdrawal of trade preferences for developing countries as a sanction tool that is perhaps not new, but has only recently been recognized. Michael Hall and Siamak Seyfi analyze the emerging impact of sanctions on tourism. Raul Caruso argues the case of positive sanctions (conditional rewards) that can sometimes succeed where negative sanctions (conditional punishments) fail.

The remainder of this introductory chapter is organized as follows. The next two sections provide some context reporting for the increasing use of economic sanctions over time (Section 1.2) and trends in the economic sanctions discourse (Section 1.3). Section 1.4 discusses the structure of the *Handbook* and introduces the chapters that have been organized in four parts on sanctions data, sanctions mechanisms, sanctions images, and (economic) sanctions impact. The final section reflects on the next steps.

1.2 THE SANCTIONS TSUNAMI

This *Handbook* was written against the background of a period in which the use of economic sanctions increased sharply.[5] Figure 1.1 illustrates that the average number of imposed economic sanctions over the years 2010 to 2019 inclusive almost doubled to 482 per year from an



Sources: Calculated from the Global Sanctions Data Base (accessed January 31, 2021, see Chapter 4 of this *Handbook*) and van Bergeijk (2019a).

Figure 1.1 Sanctions impositions and openness of the world economy (averages by decade, 1950–2019)

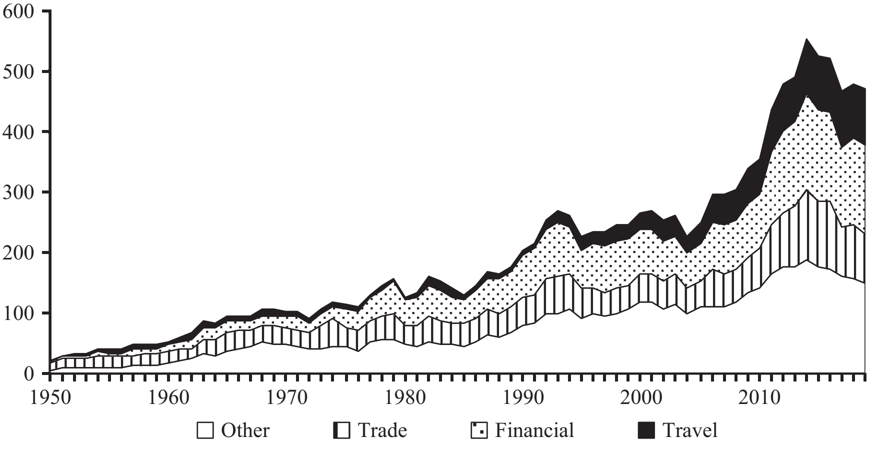
average of about 250 fifty sanctions per year in the 1990s and 2000s. It is important to note that Figure 1.1 is based on averages per decade and thus conceals that the all-time highs in sanction application were in 2014 to 2016, well before the erratic US foreign and trade policies of 2017 to 2020.[6] The increase in the 2010s makes this *Handbook* even more relevant, of course, but it also suggests an important puzzle: Why did the world use sanctions so much more often?

Could history help us to understand the increase in the 2010s? After all, a similar increase in the use of economic sanctions can also be observed in the 1990s that has been called 'the sanctions decade' (Cortright et al., 2000). The year 1990 marked the end of the Cold War, the sanctions against the Iraqi occupation of Kuwait, and the start of a significant increase in the speed of globalization (that can be recognized in the rightward shift of the curve in Figure 1.1). These three events were readily identified as factors behind the increase in the use of economic sanctions (van Bergeijk, 1994).[7] The three drivers of the increase are, of course, to a large extent interrelated. Indeed, the end of the superpower conflict enabled UN sanctions to be implemented quickly and comprehensively: The severe, wide-ranging, and almost watertight sanctions against Iraq in 1990 were implemented in four days, and for the first time in history traditionally neutral Switzerland participated (Smeets, 1990). This experience was the basis for the UN sanctions wave, the emergence of which is discussed by Biersteker and Hudáková in Chapter 5. Globalization, stimulated by the breakdown of Communism, opened up many economies that previously could hardly have been hurt by economic sanctions. All in all, the historical context seemed to be broadly conducive to the increase in impositions in the 1990s.

In the 2010s, the apparent increase to an average of almost 500 imposed sanctions per year is, however, from a geoeconomic perspective more difficult to understand. First, the geopolitical context of the 2010s is a mirror image of the détente and *perestroika* that led to the fall of the Berlin Wall and the Iron Curtain. Currently a Cold Trade War—if not a new Cold War (see Chapter 2 by Hufbauer and Jung)—is emerging. US–Chinese rivalry is one important driver. Other determinants are the sanctions and counter sanctions between Russia, the EU, and the USA that are analyzed by Matěj Bělín and Jan Hanousek in Chapter 13 of this

Handbook.[8] Second, the other major cases of the 2010s, the sanctions against Iran (discussed by Bader Sabtan, Marc Kilgour, and Rami Kinsara in Chapter 17 and by Sajjad Faraji Dizaji in Chapter 18) and North Korea (discussed in Chapter 11 by Baran Han), were protracted and characterized by unstable sender coalitions. Third, the Financial Crisis in 2008/9 was a turning point for globalization with global openness decreasing even before the trade wars initiated by President Trump, the exit of the UK from the EU, and the trade crunch of the COVID-19 pandemic (van Bergeijk, 2019a; 2021). The increase in imposed sanctions is thus actually coinciding with a deglobalization phase unlike the upswing of globalization that characterized the 1990s. Indeed, the almost exponential increase in sanctions impositions creates trade uncertainty that is a strong incentive for firms and countries to reduce international specialization. It is tempting to conclude that the rise in economic sanctions has reduced the extent of international worldwide exchange. But it is, of course, equally possible that economic sanctions are a symptom of the underlying disease of deglobalization that started around 2008/9. If so, that may offer a structural explanation for the stark increase of sanctions implementation in the 2010s.

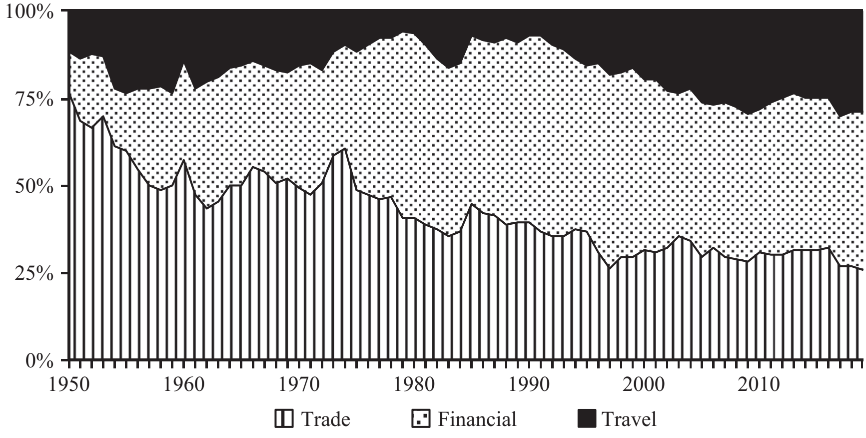
Figures 1.2 and 1.3 suggest a composition effect (Figure 1.3 focuses on the economic domain, i.e., excluding military and other sanctions). As discussed by Gary Hufbauer and Euijin Jung in Chapter 2 of this *Handbook*, sanctions innovation enabled the expansion of economic sanctions. The analysis by Aleksandra Kirilakha, Gabriel J. Felbermayr, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov in Chapter 4 points to a strong growth in travel sanctions and especially financial sanctions (a doubling over the last two decades). One of the financial innovations is the use of the SWIFT network that de facto cut off Iranian financial institutions from financial transactions in 2012, discussed by Sajjad Dizaji in Chapter 18, but the change actually started much earlier. Dennis Halcoussis, William H. Kaempfer, and Anton D. Lowenberg in Chapter 7, for example, pinpoint the 2001 Al Qaeda attacks on the USA as a trigger for weaponizing financial instruments (see also Farrell and Newman, 2019).



Note: 'Other' comprises, among others, arms and military assistance sanctions.

Source: Calculated from the Global Sanctions Data Base (accessed January 31, 2021, see the Appendix of Chapter 4 of this *Handbook*).

Figure 1.2 Development of sanctions impositions, by sanction type (1950–2019)



Source: Calculated from the Global Sanctions Data Base (accessed January 31, 2021; see the appendix of Chapter 4 of this *Handbook*).

Figure 1.3 Share of impositions of trade, financial, and travel sanctions in economic domains (1950–2019)

But while some types of sanctions have clearly grown comparatively stronger, the increase in the 2010s was also broadly based as it occurred for every type, as illustrated in Table 1.3.[9] Therefore, the underlying trend must go beyond the composition effect.

The contributions to this *Handbook* indicate several reasons for the increasing numbers on the 'market' for economic sanctions. On the 'demand side,' the increase appears to be driven by the combination of a reduced role of armed conflict resolution and the growing importance of strategic trade policy considerations, as discussed in Chapter 2 by Gary Hufbauer and Euijin Jung.[10] On the 'supply side,' the enhanced efficiency and the reduction of collateral damage may have helped to increase the number of sanctions over time. The former decreases the costs for the sender; the latter reduces unintended costs for the target's population. Chapter 5 by Thomas Biersteker and Zuzana Hudáková details the sanctions reform processes of the

Table 1.3 Average number of sanctions impositions by decade

	Trade	Financial	Travel	Other	Total
1950s	17	6	6	10	38
1960s	25	16	9	35	85
1970s	36	29	8	46	118
1980s	39	49	10	53	151
1990s	49	77	19	96	241
2000s	51	72	41	115	279
2010s	93	138	83	168	482

Note: The category 'Other' comprises, among others, arms and military assistance sanctions.
Source: Calculated from the Global Sanctions Data Base (accessed January 31, 2021; see also Chapter 4 of this *Handbook*).

UN, US, and EU sanctions in the 1990s and 2000s when sanctions practitioners were on a steep learning curve. In the same vein, Bryan Early in Chapter 8 discusses how the process of implementation and compliance regarding US sanctions has been improved thanks to major investments in staffing, procedures, communication, and monitoring.

In addition to these underlying drivers that work at the national level, the perceived need to support global public goods by imposing costs on free-riding behavior is a relatively new element.[11] This issue may be particularly relevant in the context of 2020 and 2021: The COVID-19 pandemic, global warming, and the proliferation of weapons of mass destruction are global public bads.[12] Their solution requires strengthening of global public goods management. However, this collective action is complicated by fragmentation of the world economy in the wake of deglobalization (basically, the challenge to US hegemony caused by the rise of China). This situation has threatened the working of global institutions such as the WTO. This trend is strengthened by the increasing weight that is being put on nationally defined economic security (van Bergeijk, 2019a).

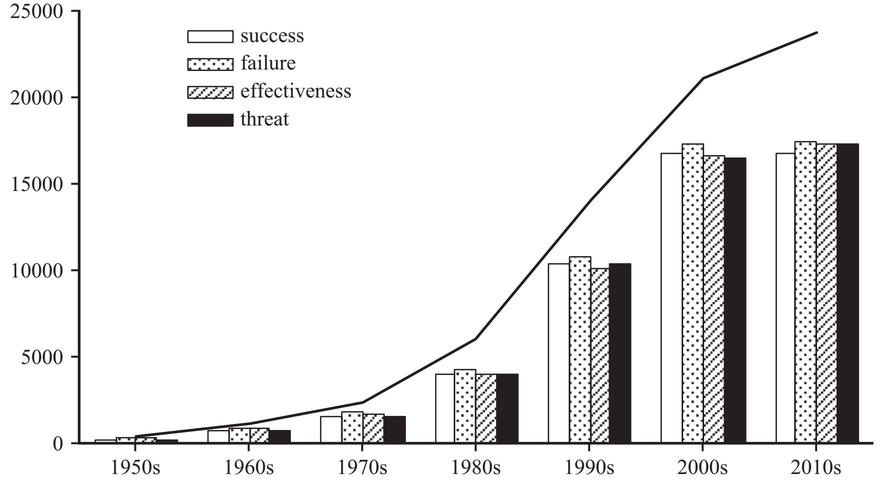
One of the paradoxes of the increase in the number of sanctions is that the availability of more observations has not led to scientific agreement, but has rather resulted in greater diversity of views and findings. This is even true for relationships that were initially seen as the Tables of the Law of economic sanctions. An example is the finding of Rose (2018) that sanctions are a non-event in terms of trade impact. Using a gravity model and the TIES data set, Rose finds that soft power, that is, the potential to apply sanctions, influences trade rather than their actual implementation. The non-event character is in line with the findings of Bělín and Hanousek for EU sanctions in Chapter 13 of this *Handbook*, but contrasts with the research based on the GSDB data set reported in Part IV of this *Handbook* by Kohl (Chapter 21) and Dai, Felbermayr, Kirilakha, Syropoulos, Yalcin, and Yotov (Chapter 22).

1.3 THE ACADEMIC DISCOURSE ON SANCTIONS EFFECTIVENESS[13]

At the start of the Millennium, David Baldwin (2000, p. 80) observed that 'the debate over whether economic sanctions "work" is mired in scholarly limbo.' Baldwin was certainly not the first nor the last to observe the heterogeneity of findings and views. The meta-analysis by Demena et al. in Chapter 6 of this *Handbook* documents the inconclusiveness and contradictions in the body of primary studies that relate sanctions success to pre-sanctions trade linkage, sanctions duration, and pre-sanctions sender–target relations, respectively. As illustrated by Table 6.2, this is even true for peer reviewed articles that appeared in the leading scientific journals in the field. Indeed, the post–Second World War literature on economic sanctions can be characterized by an increasing dispersion and inconclusiveness of reported parameters. This is certainly not because the literature has not dealt with this issue.

Figure 1.4 illustrates both the growth of research on economic sanctions and the role that the concepts of 'failure' and 'success' have always played in the academic debate on economic sanctions.[14] This makes the puzzle that the debate on the effect(iveness) of sanctions has not been resolved even more relevant. It is worth delving a bit deeper into this issue.

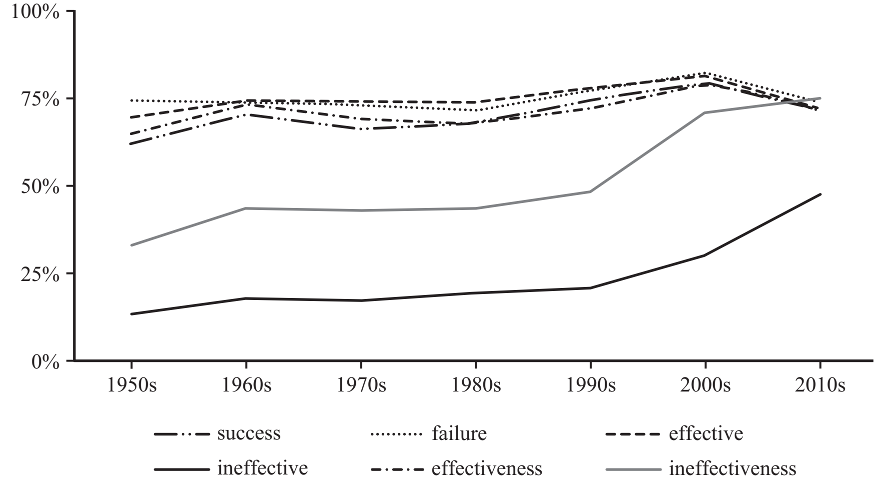
Figure 1.5 provides another first rough characterization of the problem at hand. The numbers are in percent of the total for economic sanctions (that is: the number represented by the line in Figure 1.4). Thus, the focus in Figure 1.5 is on the relative importance of concepts rather than on absolute numbers. Over the post–Second World War period, these shares are stable for



Note: ‘Total economic sanctions’ reports the number of results returned for (‘economic sanctions’). For a key concept (e.g., success) the number of returned results relates to searching for (‘“economic sanctions” success’).

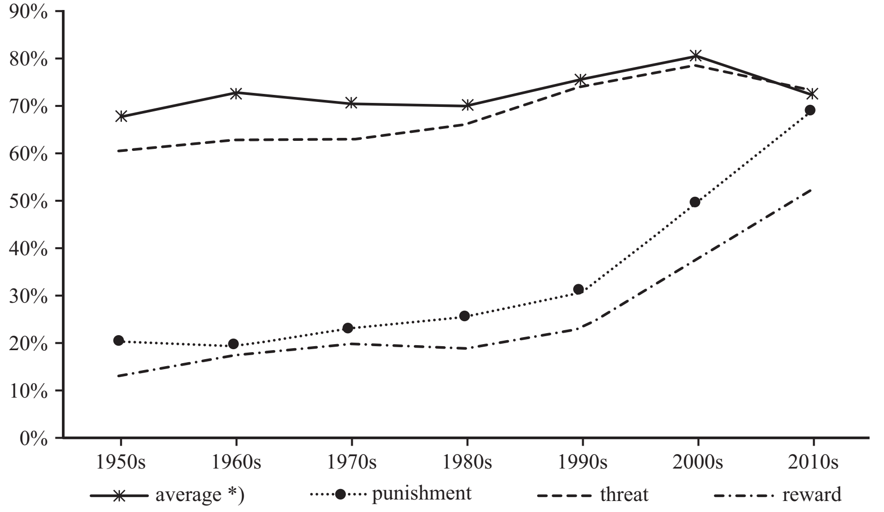
Source: Google Scholar, accessed December 31, 2020.

Figure 1.4 Number of Google Scholar hits for ‘economic sanctions’ and two key concepts by decade (1950–2019)



Note and source: see Figure 1.1.

Figure 1.5 ‘Ineffective’ and ‘ineffectiveness’ have become much more important attributes in the sanctions literature share in total economic sanctions (Google Scholar hits for key concepts by decade, 1950–2019)



Note: (*) unweighted average of the shares for success, failure, effective, and effectiveness (reported in Figure 1.5).

Source: see Figure 1.4.

Figure 1.6 The concept of 'threat' has always been a common element of the economic sanctions literature, but 'punishment' and 'reward' have only gained ground since the start of the millennium (Google Scholar hits for key concepts by decade, 1950–2019)

'success,' 'failure,' 'effective,' and 'effectiveness' (the dotted lines in Figure 1.5). 'Effective' and 'effectiveness' appear to be a common concept in the sanction debate over the whole period (with a score that is comparable to 'failure' and 'success'). At the same time, we see that 'ineffective' and 'ineffectiveness' start from a significantly lower share, and since the 1990s these concepts have been catching up (an increase of 25 percentage points). This observation illustrates that the concept of (possible) ineffectiveness of economic sanctions plays an increasingly large role in the debate. The fact that the concepts of 'ineffective' and 'ineffectiveness' have become more frequent attributes in the sanctions debate could reflect a more balanced approach, a mere change in language, or an underlying empirical trend that establishes ineffectiveness more frequently.

Interestingly, these developments in the discourse on economic sanctions appear not to have been driven by the introduction of new concepts such as threats (Figure 1.6; explicit consideration of punishment and reward since the 2000s is, however, noteworthy). Neither does the emergence of 'smart sanctions' seem to be a driver. As observed by T. Clifton Morgan, Navin Bapat, and Yoshiharu Kobayashi in Chapter 3 of this *Handbook*, "the use of targeted sanctions has dramatically increased in the 1980s and the 1990s, while its usage fell in the 2000s and [that], surprisingly, a large percentage of sanctions were smart before the 1980s." Therefore, the emergence of the idea of ineffective economic sanctions (or the realization this topic requires an explicit discussion) seems to be a stylized fact of the sanctions discourse. The bottom line is that ineffectiveness is a common element of the sanctions discourse. In turn, effectiveness that was generally expected by the introduction of the 'terrible weapon' by the League of Nations (de Fiedorowicz, 1936) is not taken for granted anymore.

It is not uncommon to find that the literature on a topic develops in opposite directions and that seminal results are contested. According to Goldfarb (1995), the time pattern of findings

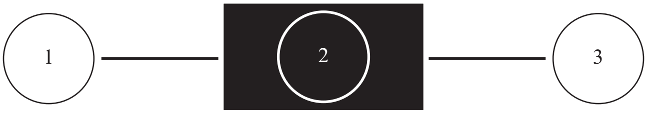


Diagram 1.2 The sanctions black box

in economics very often starts with a paper that reports a new and exciting statistically significant result. Consequently, it initiates a stream of skeptical publications that contest the original result and, in a later round, new papers contest the contestations, and so on, until the literature converges. In any emerging scientific field, many findings are 'preliminary' and often contradictory due to the process of finding out the true effect.

One particular problem with the discourse is that economic sanctions could be seen as a container in which many parcels fit. At first sight, a common language for the analysis of economic sanctions would seem to exist. After all, scholars of international relations—independent of their specific economic, political, or legal background—talk about 'sanctions' using the concepts of the 'sender' and the 'target.' It is a blessing that the language is the same across disciplines but, as it happens, every element of the sanctions black box is characterized by underlying heterogeneity.

Consider the three elements in Diagram 1.2. We start with the sender (1). For most scholars it is obvious that the sender is a state or an international organization such as the United Nations. Indeed, all contributors to this *Handbook* seem to work with this conceptual framework in mind. This, however, excludes all non-state activities that, with similar aims and instruments (but without government instruction), disconnect from a target economy. Thus, this shared framework excludes Non-Governmental Organizations in, for example, the aid industry that limit development cooperation or universities that reduce academic exchange. It also excludes consumer boycotts that can be organized or based on informally coordinated fuzzy networks or that can alternatively be aimed at reducing the target's economic hardship, for example, by means of remittances.[15] Even when the sender is purely in the state domain it may work via indirect third-party channels. The point is clear: 'Sender' is a very heterogeneous concept, and this may account for the diversity of findings.

On the right-hand side of Diagram 1.2 we find the target. Sanctions initially used to be seen as measures by states toward states, to be assessed appropriately at a national macroeconomic, social, and political level. The development of smart, targeted sanctions against elites, individuals, firms, sectors, facilitators, and constituencies is now, however, common practice in the design of sanctions measures and the heterogeneity of targets is, accordingly, reflected and discussed in much detail by the contributions to this *Handbook*. Relatedly, sanctions are hybrids and often contain both general as well as targeted aspects. So, also with respect to targets, the heterogeneity of findings in the literature could be related to the diversity of the content of the applied concept that may differ by study.

The central element in Diagram 1.2 can truly be seen as a black box, as it was in the initial empirical research on success and failure of economic sanctions that by and large relied on quasi-postulated reduced-form equations without proper consideration of conceptual measurement issues and/or theoretical backing. This *Handbook* shows that science has already come a long way in understanding sanction mechanisms as illustrated by the contributions in Part II.

Different mechanisms such as imposition versus threat (Afesorgbor, 2019), actual versus potential costs (van Bergeijk,1989), sanction risk versus trade uncertainty (Golikova and Kuznetsov, 2017), or deterministic versus strategic (Tsebelis, 1989) will have different results. This impacts how the literature perceives the efficacy and efficiency of sanctions policies. Also, the scope of mechanisms that are considered to be relevant has expanded significantly. It is increasingly being recognized that soft factors such as culture and institutions also play a role in negative economic interaction. Driscoll et al. (2010) show the importance of cultural factors for both the choice to use economic sanctions and the outcome of economic sanctions. In addition, political aspects have to be taken into consideration. For instance, Early and Peksen (2020) have recently raised the issue that developments in the informal sector may be drivers of sanctions outcomes especially in democracies. A related issue is that sanctions application has changed fundamentally throughout the last quarter of a century. As a result, research dealing with the previous century may not be relevant in the current context (Early and Cilizoglu, 2020).

The sharp observer may already have noted that the relationship between sanction and target is not indicated by an arrow in Diagram 1.2. This is not an omission. Sanctions often generate counter sanctions like in the EU–Russia tit-for-tat discussed by Bělín and Hanousek in Chapter 13 of this *Handbook*. Potential targets, moreover, can reduce the impact of sanctions, diminishing their vulnerability and their dependence on foreign markets and increasing their own resilience both economically and politically (see, for example, Burlone, 2002 on institutional efficiency and sanctions impact).

All in all, the consensus is that the naïve view of sanctions (i.e., the assumption that a sender through imposed costs stimulates a change in the target's behavior) is too simplistic to understand the complex interactions. In fact, the conditions of time and place need to play a stronger role in assessments of sanctions, and there is a firm consensus toward this conclusion. Also, the recognition that the literature is potentially biased due to the sender-focused, state-centric interpretation of sanctions as a stand-alone instrument, provides a solid incentive for new and exciting research agendas (see, for example, Peksen, 2019 and Jones and Portela, 2020). The consequence is, first, that we need to recognize this heterogeneity and, second, that case-specific methods may need to be used that cannot yet be applied to large numbers of sanctions cases. The aim of the field has for too long been to reach a general conclusion, but this has come at the cost of a deeper understanding of often country-specific relationships. Using the sanctions target as the unit of observation could enable researchers to bring much needed details on country/economy-specific characteristics into the picture. Data on trade structure, production, elasticities, political systems et cetera are available for countries, but bringing such items into the realm of the traditional large-*N* studies is not feasible. The large-*N* data set is not sufficiently large, and we would soon be left without degrees of freedom. Country case studies could also include the dynamic development of political and (socio)economic variables that are missing from our current analysis of success and failure (Peksen, 2019; Dizaji and van Bergeijk, 2013). In conclusion, we need more case studies for countries that have become the target of economic sanctions. This will help us to understand differences and communalities between the cases, and once we have sufficient country case studies we can attempt to synthesize this research by means of a meta-analysis or a qualitative comparative analysis. Of course, we cannot predict if this research strategy will provide a consensus, but it will bring new knowledge and perspectives on the sanctions process that are currently not available.

1.4 ORGANIZATION OF THE *HANDBOOK* AND INTRODUCTION TO THE CHAPTERS

The contributions of this *Research Handbook* have been organized in four parts. Part I, following this introductory chapter, deals with data collection that constitutes the basis of modern sanctions research. Part II deals with sanctions mechanisms and dynamics. Part III analyzes the many appearances of sanctions, both their manifestations and forms and the guises (or perhaps facades) that characterize sanctions policies. Part IV investigates the intended and unintended impacts of economic sanctions. This organization into parts is helpful, but the reader is alerted that certain themes are common to most if not all contributions. A common thread in the articles is their forward-looking aspect in providing suggestions for further research. Indeed, this is a valuable aspect of this *Handbook* in that it shows the potential for new and challenging research agendas.

1.4.1 Data: The Large-*N* Data Sets

Part I focuses on the large country (case) level data sets that have become the dominant methodology in the field, demonstrating the tremendous progress that has been made in data collection since the publication of the seminal study *Economic Sanctions Reconsidered* by Hufbauer and Schott in 1985. The chapter also provides overviews of the empirical literature based on these data sets, as well as new applications, findings, and links to the recent literature.

Part I starts with a contribution by Gary Hufbauer and Euijin Jung of the Peterson Institute for International Economics, home to *Economic Sanctions Reconsidered* that is known in the field by the initials HO (1st edition by Hufbauer and Schott, published in 1985), HSE (2nd edition by Hufbauer, Schott, and Elliott, published in 1990), and HSEO (3rd edition with Oegg as the new co-author, published in 2007). New data sources are still based to a large extent on this seminal study. Hufbauer and Jung discuss the two decades since the start of the millennium that are not covered by the 3rd edition of *Economic Sanctions Reconsidered* and analyze new weapons, new senders and targets, new goals, and new theories. They also reflect on the perspective and role of sanctions in a post-Trump, post-COVID-19 world. Emerging technology has diversified sanctions measures from traditional trade restrictions to financial restrictions, travel bans, and contract cancellation measures. States and non-state actors have become senders as well as targets of so-called smart sanctions. A new 'Cold War' between the United States and China has dramatically reshaped the landscape of sanctions by blurring the line between commercial and political diplomacy.

Chapter 3 by T. Clifton Morgan, Navin Bapat, and Yoshiharu Kobayashi discusses their TIES (Threat and Imposition of Economic Sanctions) data set that also included sanctions threats. Those threats were sometimes so credible that they did not need to be implemented and, in this sense, were very efficient. Launched in 2009, TIES covered the years 1971 to 2000 from a strategic interaction perspective (Morgan et al., 2009). An update was published a few years later covering the period from 1945 to 2005 (Morgan et al., 2014). The chapter is particularly useful because the authors frankly discuss data collection and coding issues and critically evaluate what can and cannot be done with their data set, actually identifying a number of important questions that cannot be addressed, or addressed well, using the data. But the glass is half full rather than half empty as illustrated by their overview of studies that use TIES data. Indeed, the wave of research that was enabled by the availability of this data set holds promise for future generations of the family of large-*N* data sets.

Chapter 4 by Aleksandra Kirilakha, Gabriel J. Felbermayr, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov presents the recent update of the Global Sanctions Data Base that increases the original sample by 50 percent and extends the research period by three years to cover 1950 to 2019, inclusive. The chapter introduces and discusses 383 previously unrecorded sanctions cases among which 77 emerged during from 2016 to 2019, thus raising the total of sanctions cases recorded there to 1,105. Their descriptive analysis reveals that quite a number of sanctions were lifted in 2016. In contrast, 2017 witnessed a substantial increase in the deployment of new—primarily 'smart'—sanctions of which more than half were imposed by the United States. As these sanctions cases have not yet been resolved, their evaluation is an important issue for future research.

Chapter 5 by Thomas Biersteker and Zuzana Hudáková discusses the Targeted Sanctions Consortium (TSC) data sets on the UN targeted sanctions imposed since 1991. The motivation for targeted sanctions is to minimize humanitarian suffering and to cease the practice of making innocent populations bear the costs of the actions of governments. Biersteker and Hudáková provide an overview of the historical use and development of the UN sanctions and highlight some of the main challenges faced by UN sanctions today. They point out that the most common types of targeted sanctions—asset freezes, travel bans, and arms embargoes—were all the subject to the different sanctions reform processes of the late 1990s and early 2000s. The chapter is also important because of its comparison of the initial TSC assessment back in 2013 and the most recent assessments in the *UNSanctionsApp* (additionally covering 2014 and 2020), illustrating how different vintages of data sets can be used to show the robustness of original findings.[16]

The last chapter in this Part by Binyam A. Demena, Alemayehu S. Reta, Gabriela Benalcazar Jativa, Patrick B. Kimararungu, and Peter A.G. van Bergeijk offers a fresh perspective on the empirical literature that analyzes the large-*N* data set by means of the first meta-analysis of 37 primary studies on determinants of the effectiveness of economic sanctions published over the years 1985 to 2018. Chapter 6 demonstrates that no consensus has emerged on the impact of key variables that theoretically determine the success of economic sanctions. Although the descriptive analysis and weighted averages suggest that the impact of trade linkage, sanctions duration, and prior relations on sanctions success is significant and conforms to a priori theoretical expectations, Chapter 6 uncovers significant publication bias in the results. Bias in this literature increases over time. The implication is that methodological alternatives to the existing large-*N* data need to be developed.

1.4.2 Sanctions Mechanisms

The key assumption of all sanctions theory is that a reduction of international economic exchange will reduce the target's possibilities for international specialization, and that the ensuing welfare loss acts as (potential) punitive damage that provides an incentive to change behavior. The standard economic trade model explains that larger trade linkage generates larger damage and highlights the importance of substitution to reduce this damage, especially if the time horizon increases (Kemp, 1964; Renwick, 1981; Frey, 1984; see also Chapter 6 of this *Handbook*). This neoclassical model allows for two clear exceptions. Firstly, sanctions may work as the equivalent of a welfare improving infant industry tariff as they did during the 1966 UN sanctions against the former Rhodesia (Galtung, 1967). Secondly, the small country assumption (that is typically being used) is inappropriate for economies, firms, or industries with enough market power that may actually gain economically from the imposition of sanctions.

The latter mechanism is in a sense related to the public choice approach to sanctions that is reviewed in Chapter 7 by Dennis Halcoussis, William H. Kaempfer, and Anton D. Lowenberg. The public choice approach pioneered by Kaempfer and Lowenberg (1986, 1988, 1992) is one of the most important economic innovations in sanctions research because it looks inside the sanctions black box (Diagram 1.2) by recognizing the distributional aspects of sanctions.[17] Different (interest) groups of the target's and the sender's populations will be hit differently—both in relative and absolute terms. This brings politics into the economy of sanctions, also drawing attention to the battle between autocracy and democracy. Chapter 7 reviews the Kaempfer–Lowenberg public choice approach to sanctions and provides a selected survey of some of the literature published since 2007, demonstrating its continued importance. Looking to the future, Chapter 7 suggests that recent reversals of globalization and the rise of protectionism could potentially compromise the usefulness of economic sanctions as a policy instrument.

Chapter 8 by Bryan Early focuses on ways to make the sanctions mechanism more effective and to make the bite stronger. To make sanctions work, sender governments must obtain the compliance of the parties subject to their sanctions' jurisdiction and prevent third-party actors from undercutting the sanctions. Focusing on insights from the United States, the chapter identifies six complementary strategies for improving the effectiveness of sanctioning efforts: (i) strengthening sanctions capacity building; (ii) extraterritorial sanctions provision; (iii) building sanctions coalitions; (iv) robust implementation; (v) enforcement that is strict and severe for deliberate violators; and (vi) coercing external sanction busters. Early's analysis demonstrates that the US strategies made its economic sanctions more effective. He notes that the policies' costs as well as the sender's soft power are substantial, thus implying that smaller countries or entities would not be able to employ all strategies.

Chapter 9 by Dursun Peksen provides a detailed review of possible effects of economic sanctions on the target's political stability. The mechanism is complex as the implementation and threat of economic sanctions may increase political violence, state repression, and leadership stability in target countries. Substantial evidence exists that foreign economic pressure induces targeted governments to commit *more* repression to eliminate any potential threats to their regimes and that sanctions are likely to trigger more anti-government protests and violence. Studies also find evidence that sanctions could threaten the survival of democratically elected leaders while having no discernable effect on the stability of autocracies, except personalist dictatorships. However, instances also exist where sanctions may be beneficial such as a reduction in the duration of civil wars and a reduction in the intensity of civil conflict and violence.

Julia Grauvogel, in Chapter 10, examines the so-called internal opposition effect of international sanctions. She argues that anti-regime mobilization in countries under sanctions constitutes a key transmission belt from external pressure to domestic change. Previous large-*N* studies have tended to highlight a single mechanism that links sanctions to domestic protest, such as economic deprivation or political opportunities, or to see sanctions as signals that legitimize anti-regime activism. In order to avoid the pitfalls of qualitative research on only a few high-profile cases, Chapter 10 demonstrates the method of Qualitative Comparative Analysis (QCA) covering 75 sanctions cases and finding that the simultaneous interplay of economic deprivation, political opportunities and signaling accounts for opposition mobilization under sanctions. QCA clearly expands the toolkit of sanctions researchers, but Grauvogel also points out the limitations and the need to conduct robustness checks.

The sanctions mechanism is not limited to the internal working of economic pressure; the external context is also very important, of course. Baran Han, in Chapter 11, provides both a game-theoretic analysis to explore the mechanism of secondary sanctions (legal grounds to punish third parties) as well as an application based on the case of the US sanctions against North Korea in the years 2016 and 2017. This game-theoretic framework captures the sanctions dynamics among a leading sender, target, and a third party with weapons technology advancing over time. The target's opportunity costs of the technology (that is the marginal costs of giving up the weapon innovations) and the third party's voluntary sanctions level determine the extent to which the target complies. The case study details the different channels through which the US secondary sanctions, together with the UNSC Resolutions, coerced China to ratchet up its sanctions level against North Korea. Ultimately, this contributed to getting North Korea to the negotiation table in 2019. This chapter provides both an analysis of the potential usefulness of secondary sanctions in so-called deadlock conflicts and a best practice illustration of the building blocks of applied game-theoretic modeling.

Michal Onderco and Reinout A. van der Veer, in Chapter 12, focus on the role of firms. As sanctions are often imposed by states, state-centric data environments dominate research, eschewing firm-level analysis. Yet, firms are crucial actors for understanding sanctions. Scholarship has recently started to focus on the role of private actors (such as firms, banks, or insurance companies). Chapter 18 in this *Handbook* by Sajjad Faraji Dizaji is an example.[18] Onderco and van der Veer outline, theoretically, why firms matter, and how the study of firms fits the existing scholarship on sanctions developed in the state-centric model. The chapter discusses many methodological challenges associated with studying the role of private companies in relation to sanctions (both qualitatively and quantitatively) and with considering large-*N* census data surveys as well as small-*N* research strategies. Again, the implication is that methodological alternatives to the existing large-*N* data need to be further developed.

1.4.3 Appearances and Imaging

Sanctions come in different forms. New forms of sanctions have emerged covering, for example, travel, finance, and increasingly individuals. As will become clear, some measures are posed as sanctions but are de facto symbolic, while other limitations on international economic exchange that are currently being applied remain hidden and have only recently been recognized as sanctions in the literature.

An important issue is that all trade restrictions cause costs to both the sender and the target. The sender may therefore want to design the sanctions measures in such a way that the loss for its own businesses is minimized. In practice, this means that the sanctions will be less effective. Chapter 13 by Matěj Bělín and Jan Hanousek focuses on this issue. They analyze the different impacts of the 2014 EU sanctions against Russia and the Russian countersanctions providing two methodological innovations: (i) a hybrid approach combining VAR and difference-in-difference modeling to test the structural breaks at the time of imposition of economic sanctions; and (b) out of sample predictions to estimate the loss of trade to the EU and to Russia. Using three different estimation techniques, they show that the 2014 EU sanctions on exports to Russia were enforced selectively causing only minor disruptions. The EU sanctions are keeping up appearances and boil down to mere gestures according to their findings. In contrast, the Russian countersanctions against imports from the EU caused major losses for the EU trade, indicating comprehensive enforcement. Chapter 13 argues that these results are consistent with the theoretical literature which emphasizes the difficulty of imposing sanctions on exports and the potential value of sanctions as a signaling device, rather than an economic weapon.

Chapter 14 by Clara Portela investigates a hidden sanction. The international protection of human rights and labor standards finds reflection in the General Scheme of Preferences (GSP) that is subject to a suspension clause in the event of major breaches. Although the largest markets have repeatedly suspended trade preferences for developing countries on political grounds, this practice is seldom the object of scholarly inquiry. However, it constitutes a key instrument in the toolbox for the protection of human rights and labor standards worldwide, with a modest but nevertheless growing activation record. Reviewing suspension practice and associated controversies, Portela concludes that GSP withdrawals constitute economic sanctions and function as such.

Chapter 15 by Maarten Smeets focuses on the tension between the use of economic sanctions as a trade policy instrument to defend national security interests, the fundamental objectives, and the principles of the WTO. The use of economic sanctions is covered under the security exceptions in the WTO, more specifically Article XXI, ensuring that WTO Members can defend their legitimate national security interests, but has generally escaped scrutiny, as 'self-judgment' by Members has been the general rule as illustrated by this chapter's detailed overview of Article XXI applications under GATT and WTO governance. Recently, the reign of self-judgment, however, was challenged, when WTO judges reviewed the legality of measures taken by the Russian Federation against Ukraine, thus, creating a precedent in reviewing the conditions under which Article XXI can be invoked.

Chapter 16 by Raul Caruso focuses on the costs and benefits of (shifting between) negative and positive sanctions. Three aspects appear to be crucial. First, a proper consideration of interest and social groups explains the failure of comprehensive negative sanctions, the success of smart sanctions and—more interestingly—the potential success of positive sanctions. Second, the existence (or the lack) of some institutional arrangement between states explains the failure of negative sanctions as well as the potential success of positive sanctions. Third, the credibility of threats and promises that are sender-dependent. On the first aspect, the lack of institutional coordination explains why sanctions-busting cannot be avoided, whereas the existence of an institutional setting favors a more peaceful trade integration associated with a reduction in the military capability of rival parties. Perceptions, time, and conditionality influence positive and negative sanctions differently. In particular, the costs of implementation in combination with the prospects for success (and possible side effects, after-effects, and efficacy) imply that reward and punishment are not merely two sides of the same coin. From a policy perspective, this analytical distinction has the additional advantage that it enables us to give a better, more comprehensive analysis of the full range of policy options, which may also take the questions of legitimacy and basic human rights into account.

The final chapter of Part III deals with an innovative way to visualize the complex strategic interaction during sanction cases. Chapter 17 by Bader Sabtan, D. Marc Kilgour, and Rami Kinsara introduces GMCR (Graph Model for Conflict Resolution) and applies it to the 2018 Iran nuclear deal. GMCR is a computer-based system for modeling and analysis of strategic conflicts that enables a user to understand what can be achieved, given the constraints faced by the various decision-makers. Since GMCR makes it easy to visualize conflicts, it serves both an educational and analytical purpose in concrete policy situations. Visualization may thus increase the understanding of conflicts and possible outcomes with the potential improvement of policymaking regarding the use of economic sanctions.

1.4.4 Economic Impacts

The focus of research over recent decades has shifted from the success and failure of sanctions to their impacts. Impact is to be understood broadly: the concept covers the intended and unintended influence on the economy. Part IV provides a specimen of new research in this strand of the literature. It covers the intended impact on financial and trade sanctions (both products and services) as well as collateral damage in the economy (in particular, the impact on FDI) and health (specifically food safety).

Part IV starts with an investigation of the target's banking efficiency, a new topic in the economic sanctions literature.[19] Chapter 18 by Sajjad Faraji Dizaji investigates the performance of Iranian banks during the different sanctions episodes and partial lifting of financial sanctions on Iranian banks' costs and efficiency scores. Deploying a stochastic frontier analysis for 12 Iranian banks over the period of 2006 to 2018, Dizaji finds that the intensity of sanctions is positively associated with increasing costs for Iranian banks. Cost efficiency scores of Iranian banks show on average a decreasing trend. The estimated cost functions make a differentiation possible between commercial (private) banks and development and state-owned banks. Moreover, the results show that although the Joint Comprehensive Plan of Action (JCPOA), a.k.a. the Iran nuclear deal, has significantly decreased the cost efficiencies of Iranian banks, it was only effective during the initial imposition of SWIFT sanctions but not after the US withdrawal.

The point of departure of Chapter 19 by C. Michael Hall and Siamak Seyfi is the increasing importance of tourism for employment, government revenue, and foreign exchange earnings. Tourism is also one of the sectors most vulnerable to economic sanctions. Tourism, defined as short-term voluntary mobility, includes not just leisure/holiday travel, but also the movement of a country's diaspora as well as business connectivity. Sanctions can affect tourism directly through the imposition of limitations on individual mobility and can also substantially affect investment in the sector. Indirectly, sanctions can affect industry access to equipment and technology and a destination's image. Hall and Seyfi discuss two issues that are overlooked: reverse causality and the target's coping strategies resulting in a 'resistive economy.' The chapter addresses these issues in relation to Cuba, Iran, Turkey, and Russia.

Chapter 20 by Irina Mirkina investigates the impact of sanctions on FDI. Some theories postulate that sanctions increase risks, costs, and uncertainty for investors; other theoretical accounts predict that businesses in an increasingly globalized world use foreign investment to deflect the negative effects of sanctions. As a result, foreign investment could be an important reason why sanctions do not work as expected. Due to the conflict of interests between the political goals of governments and the economic goals of multinational companies, a growing number of sanctions studies focus on a complex interplay between FDI and sanctions. An empirical analysis of the effect of sanctions on FDI using a sample of 177 countries over the period from 1970 to 2018 confirms that sanctions do not have a statistically significant effect on FDI; however, there is a sizable heterogeneity across the target countries. The chapter advocates the need to use bias-corrected estimators in sanctions studies to deal with heterogeneity, non-stationarity, and cross-sectional correlation.

Tristan Kohl, in Chapter 21, investigates what happens to trade at the end of sanctions episodes. Does lifting sanctions cause trade to rebound? If so, how long does such a restoration take? Looking at the United States over the period from 1989 to 2016, Kohl finds that the US-imposed trade sanctions have a short-term negative effect of 30–40 percent on US trade flows to and from targets (relative to non-targets). Financial sanctions decrease US imports by 35 percent. There is no evidence of a rebound effect. Instead, imports from former targets continue to decline by up to 70 percent relative to non-targets up to 4 years after a trade imposition has been lifted. Moreover, a non-trivial 7 to 14 percent of US exports is deflected to targets' geographic neighbors during trade sanctions, pointing to exporters' agility in reorganizing regional supply chains and/or 'sanctions-busting' behavior.

Chapter 22 by Mian Dai, Gabriel J. Felbermayr, Aleksandra Kirilakha, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov uses a state-of-the-art gravity trade model to investigate the trade impact of sanctions over time. In addition to a detailed discussion regarding the application of the gravity model with a focus on the impact of sanctions on trade, Chapter 22 deals with the years 1950 to 2016, providing both the longest and most up-to-date empirical evaluation of sanctions. The contemporaneous effects of sanctions on trade are large, negative, and statistically significant with anticipatory effects prior to the official imposition of sanctions. However, the authors also find negative and significant post-sanction effects, which disappear gradually approximately eight years after the lifting of sanctions. Importantly, the strength of the negative impact of sanctions tends to rise with the duration of the time that sanctions are in force. These findings have an important message well beyond the specific field of economic sanctions: The variation in internationalization due to sanctions (and their lifting) helps us to better understand the benefits and costs of opening up an economy.

Chapter 23 by Sylvanus Kwaku Afesorgbor focuses on an unintended consequence, namely the sanctions exacerbating the target's state of food insecurity. Afesorgbor analyzes the impact on different measures of food security for 66 countries in the period from 1990 to 2014 and shows that the imposition of sanctions hurts food security. Sanctions significantly increase the composition of the global hunger index and also adversely affect the availability and stability dimensions of food security. In addition, Chapter 23 reports that the simultaneous application of financial and trade sanctions increases the negative impact on food security compared to their separate use.

The final chapter of this *Handbook* thus uncovers a negative trade-off between Sustainable Development Goals by highlighting the negative impact on SDG 2 to 'End hunger.' Sanctions are often implemented with the intention of strengthening and promoting 'peaceful and inclusive societies for sustainable development' (SDG 16) and the reduction of human rights violations provides a motivation in terms of the global social contract of the SDGs. By their very design, sanctions carry a negative impact on economic growth and employment (SDG 8).[20] The negative trade-off on SDGs appears to be a general characteristic.[21] The lens of the SDGs can provide a new framework for policymakers and researchers to investigate the costs and benefits of economic sanctions and to see their success and failure from a different angle: not from a national but from a global perspective. This will provide new recognition of the trade-offs between politics and economics, building on the trade-offs and uncertainties identified in this *Handbook*. An important issue, however, is the contradictions regarding those trade-offs that are described in the literature.

1.5 WHAT NEXT?

It is not uncommon that the literature on a topic periodically evolves in opposite directions, and that seminal results are contested. In any new strand, many findings are 'preliminary' and often contradictory due to the process of scientific discovery. Some strands are dead-ends but others become new highways. The field of economic sanctions, however, would seem to contradict the 'law' that new results drive out old results until a new consensus emerges, as the literature does not appear to converge.

Bias occurs in a literature because researchers typically are intrinsically motivated. Economic sanctions are applied to a great variety of issues, including adherence to human rights, and have—as all economic activities—external effects. Obviously, economic sanctions are applied in a context of international conflict with different impacts on sender(s) and target(s). For some, sanctions are an alternative to all-out war. Also, the tension between sanctions and free trade is a relevant issue. All in all, sanctions have a high societal and political relevance, and therefore, researchers could be (explicitly or implicitly) driven by their ideals or ideologies to report results that fit their world view, both in terms of problem identification and solutions, as well as instruments (and, importantly, may ignore results that contradict their view of the world). If so, political cycles and geopolitics to a large extent could explain the lack of convergence and absence of a consensus. The process may also be distorted by publication bias typically introduced into the publication process by the selection of particular results. Firstly, editors and referees prefer convincing papers and, too often, they look for papers with large and highly significant coefficients. It is, thus, more difficult to publish less significant findings, and this distorts what we see published in the journals. In the same vein, it is easier to publish a paper that contradicts rather than confirms existing knowledge. Confirmation tells us something that 'we already know.' The findings of the meta-analysis of quantitative sanctions research by Demena et al. in Chapter 6 are in a sense encouraging as they do not find evidence that the problem is related to the peer review process per se or to the national (US versus non-US) and scientific (Political Science versus Economics) background of researchers. Still, the increasing bias is a clear concern that gives a reason to rethink the dominant methodology based on large-*N* data collections (Peksen 2019). So, what to do?

There is a clear demand for new ways of looking at the goals, (in)effectiveness, and impact of economic sanctions (see, for example, Peksen 2019; van Bergeijk 2019b; von Soest 2019; Early and Cilizoglu, 2020; and Jones and Portela, 2020). The value added of this *Handbook* is that it is as much about sanctions research as it is about economic sanctions per se, so that we can glean where the literature can be strengthened: a revival of country studies and case studies. Using the sanctions target (this can be a country, a population, a region, or an elite) as the unit of observation will enable researchers to bring much needed details into the picture. Detailed data on trade structure, production, elasticities, political systems, resilience, et cetera are available. It definitely can be developed for cases, but bringing such items into the realm of the traditional large-*N* studies is not yet feasible. Our large-*N* is not sufficiently large because we typically have many missing observations in cross-sectional and panel research and a great many explanatory variables. As a result, we end up being left without degrees of freedom. Country case studies are very useful to develop new methods, as shown by many contributions to this *Handbook*. They provide us with a unique opportunity to understand the dynamic development of political and (socio)economic variables (such as GDP, inflation, and debt) that is missing from the current analysis of economic sanctions.

Once we have sufficient country studies, new methodologies such as qualitative comparative analysis and meta-regression analysis will help us to understand differences and communalities between the cases. Of course, we cannot predict if this research strategy will provide a clear consensus, but it will bring new knowledge on the sanction process that is currently not available.

NOTES

1. Comments by Gina Ledda, Clara Portela, Zuzana Hudáková, Sylvanus Afesorgbor, and Ksenia Anisimova are gratefully acknowledged.
2. Balanced and constructive reviews include Bull (1994) and Drury (1998).
3. The gravity model is a well-tested, well-established trade model that has often been used at the interface of economics and politics (van Bergeijk and Brakman, 2010).
4. See van Bergeijk and Lazzaroni (2015) for a discussion of the strengths and weaknesses of meta-analysis and traditional narrative review of literature.
5. This project started with an invitation by Caroline Kracunas of Edward Elgar Publishing Inc. in early 2019 and, while originally planned to appear in 2020, suffered delays due to the outbreak of COVID-19. All chapters were peer-reviewed.
6. Chapters 3 and 7 discuss the use of sanctions by the Trump administration to some extent, and Chapter 4 provides a first empirical evaluation.
7. In addition to this structural geoeconomic transformation, some trends were recognizable: the proliferation of weapons of mass destruction, the greening of trade issues, and the potential for the protectionist use of sanctions suggested that demand for sanctions would increase (van Bergeijk 1995).
8. See Chapter 2 of this *Handbook* by Hufbauer and Jung, and van Bergeijk (2014).
9. See, for a contrasting opinion, Weber and Schneider (2020), who use their EUSANCT data set to argue that neither the US nor not the overall success of sanctions have grown from 1989 to 2015.
10. See also Aggarwal and Reddie (2020) on the New Economic Statecraft approach.
11. See, for example, Cirone and Urpelainen (2013) on the use of sanctions to support global environmental policies.
12. Some, like Caruso (2020), point out the emergence of a new problem emerging with the rise of authoritarianism and (armed) conflicts threatening world peace.
13. This section is partially based on van Bergeijk (2020).
14. Figure 1.4 provides an (admittedly rough and mechanic, but still useful) characterization of the post–Second World War literature. Based on my own understanding of the literature that guides the choice of relevant concepts that characterize the sanctions debate, this section can be seen as a first step in discourse analysis (cf. Hsieh and Shannon, 2005). The figure uses Google Scholar as a source because it also covers books that have always been and continue to be important academic outlets for the topic of economic sanctions as well as the gray literature of policy documents and working papers, which is appropriate for a topic like economic sanctions with significant societal impact and the need for evidence-based policymaking.
15. See Grosso and Smith (2005) and Basu and Zarghamee (2009) on consumer boycotts.
16. See van Bergeijk and Siddiquee (2017) with respect to the different vintages of *Economic Sanctions Reconsidered* and Chapter 20 by Irina Mirkina that provides a comparative analysis of TIES and GSDB data.
17. A similar approach was pioneered in the field of International Relations by Kirshner (1997).
18. See also Crozet et al. (2020) on export behavior toward targeted nations and Gullstrand (2020) on Swedish firms in the wake of the Crimean Crisis and their decisions at the product level and on all markets, including the national one.
19. Performance of stock markets of countries targeted by sanctions has recently been investigated by Biglaiser and Lektzian (2020) who analyzed monthly market data for 66 countries from 1990 to 2005 and found a strong negative impact for 'fresh' targets.
20. SDG 8 is one of the strongest SDG-hubs with many connections to other goals (Le Blanc, 2015).
21. Other basic rights may be violated by the application of economic sanctions. Sanctions tend to increase income inequality (Afesorgbor and Mahadevan, 2016) and thus, a negative trade-off also exists with SDG 10 (reduction of inequality). A potentially negative trade-off also exists for such diverse areas as SDG 5 (gender equality; see for example, Drury and Peksen, 2014), SDG 3 (health, see for example, Gutmann et al., 2021) and SDG 13–15 (environment, see Fu et al., 2020). The debate about the sign and significance is still ongoing (see Gutmann et al., 2020 for an overview) and research regarding the impact on some SDGs is still in an early phase (for example, SDG 4 'Ensure inclusive and equitable quality education and promote life-long learning opportunities for all'; see Hwami, 2021).

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