



## Hidden in Plain Sight: Unpaid Household Services and the Politics of GDP Measurement

Daniel DeRock

To cite this article: Daniel DeRock (2019): Hidden in Plain Sight: Unpaid Household Services and the Politics of GDP Measurement, New Political Economy, DOI: [10.1080/13563467.2019.1680964](https://doi.org/10.1080/13563467.2019.1680964)

To link to this article: <https://doi.org/10.1080/13563467.2019.1680964>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 24 Oct 2019.



Submit your article to this journal [↗](#)



Article views: 2789



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)

# Hidden in Plain Sight: Unpaid Household Services and the Politics of GDP Measurement

Daniel DeRock

Department of Political Science, University of Amsterdam, Amsterdam, Netherlands

## ABSTRACT

Gross domestic product (GDP) is one of the world's most influential and widely cited economic indicators. However, outside of the industrialised, market-based context in which the indicator was first designed, GDP measurement suffers from a number of biases and blind spots. The article zooms in on one of these: the exclusion of unpaid household services from the production boundary of the System of National Accounts, the international standard underpinning GDP methodology. While GDP has expanded over time to include activities as diverse as financial services and the informal sector, the treatment of unpaid household services has remained unchanged. Why is this? I find that staff in the statistical departments of international organisations such as the United Nations, International Monetary Fund and World Bank have a tremendous degree of agency in the governance of GDP. While these statisticians are aware of and engage with criticisms, they reject the inclusion of unpaid household services based on shared professional norms and economic ideas.

## KEYWORDS

International standards; international organisations; gender; expertise; unpaid work

## Introduction

Few numbers are as ubiquitous in political and economic analysis as gross domestic product (GDP). This powerful indicator is enlisted to rank and compare national economies, it influences lending and investment decisions, and is often taken as a proxy for well-being (Stiglitz *et al.* 2009). Because they are produced by governments and based on internationally harmonised guidelines, GDP and other economic indicators appear to be objective and unbiased. But statistical concepts originally designed for industrialised market economies do not travel seamlessly to other kinds of socioeconomic settings – for example, low-income areas with high levels of subsistence and informal activity.

The result is that certain economic activities are captured while others are rendered invisible in GDP figures (Morgan 2009, Mügge 2019). One topic in particular has been a thorn in the side of economic statistics for decades: the measurement of unpaid household services<sup>1</sup> (or unpaid services, for conciseness). These services largely overlap with care work and domestic labour and are disproportionately performed by women. While GDP has expanded over time to include other forms of unpaid work such as subsistence agriculture, the exclusion of unpaid household services has only become more concrete in international statistical standards. This exclusion has persisted alongside considerable contestation and deliberation among economists, statisticians and feminist scholars. What explains the persistent exclusion of unpaid household services from GDP?

**CONTACT** Daniel DeRock  d.j.derock@uva.nl

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Two competing perspectives have dominated debates about this exclusion. One is rooted in feminist – and, to some extent, postcolonial – critiques of the microeconomic theories underlying GDP methodology. The other is the pragmatic and seemingly depoliticised perspective advanced by statisticians themselves. Feminist scholars have demonstrated that the exclusion of unpaid household services from official statistics introduces a major bias into economic analysis and policy (Benería 1992, Waring 1999, 2003). The implicit argument is that this oversight is a result of institutionalised gender bias. Economic statisticians, on the other hand, contend that this kind of work is difficult to quantify and falls outside of the market dynamics that GDP figures should capture. Thus, including these activities would compromise the reliability and cross-national comparability of GDP. The international political economy (IPE) literature has paid little attention to these debates (cf. Hoskyns and Rai 2007). Yet IPE approaches are well suited to address two key characteristics of GDP that have largely been ignored: the global governance of GDP measurement and the agency of the experts who shape it.

This article demonstrates that economic statisticians, specifically those working as staff in the statistical departments of international organisations such as the International Monetary Fund (IMF) and the United Nations (UN), have a high degree of agency to determine the concepts and methodologies underlying GDP. Contrary to what would be anticipated by interest-based approaches, the preferences of member states, and of any other external actors, have little impact on the governance of GDP. Rather, the authority that statisticians derive from their positions as specialised experts leaves them largely immune from formal constraints. Rather than ignoring the problem, statisticians are well aware of criticisms but reject the inclusion of unpaid services on the basis of shared ideas about the limits of ‘the economy’ and the policy applications of official statistics.

These conclusions are based on an extensive literature review, official reports and minutes of meetings, and in-depth interviews. 29 interviews (some with multiple participants, for a total of 36 interviewees) were conducted between 2017 and 2019 with current and former staff and directors of statistical agencies including the IMF, World Bank, United Nations Statistics Division, UN ESCAP, private development consultants, and national statistical offices in Laos, Thailand, and Ghana. Document analysis focuses on the two most relevant international bodies, namely the United Nations Statistical Commission and the Intersecretariat Working Group on National Accounts. The latter is composed of experts from the IMF, World Bank, United Nations, OECD and the European Commission.

There are two main contributions. First, the article adds historical and institutional context to ongoing debates about the limitations of GDP (Fioramonti 2013, Philipsen 2015, Masood 2016, Pilling 2018). On the whole, scholars have taken aim at GDP without recognising how and by whom it is governed. By taking the criticisms seriously but taking a step back from the debates, I show why there is a gap between aspirations (of critics and advocates alike) and actual outcomes. This approach takes up Mügge’s (2016, p. 422) call to study indicators as ‘powerful, institutionalised ideas’. Second, the findings contribute to the wider IPE literature, particularly constructivist perspectives on IO behaviour (e.g. Barnett and Finnemore 2004, Vetterlein 2014, Enns 2015, Broad 2006) and expert-centred theoretical approaches (e.g. Sending 2015, Seabrooke and Tsingou 2016, Leander and Waever 2018, Dersnah 2019, Kunz *et al.* 2019).

The article proceeds with a review of literature on the politics of GDP, unpaid work and plausible theoretical approaches. The third section describes the global governance of GDP measurement and explains why it is largely insulated from formal constraints. The main body is an empirical analysis of the GDP revision process. This section first demonstrates the resistance of economic statisticians to the inclusion of unpaid household services in the GDP production boundary, and then closely analyses expert deliberation in the revision process leading up to the 1993 System of National Accounts. This revision process, which spanned approximately ten years, was a decisive period for the treatment of unpaid services. A fifth section concludes and discusses the limits and possibilities of fundamental changes to GDP measurement in the future.

## GDP Through the Looking-Glass: Debates and Theoretical Approaches

### *Contested Perspectives on Unpaid Work and GDP*

The measurement of GDP has come under increased academic scrutiny in recent years. Several authors have argued that GDP is a misguided and potentially harmful benchmark for policymaking (Fioramonti 2013, Philipsen 2015, Hoekstra 2019), while others have argued that it is simply too narrow of a measurement from which to draw any conclusions about the well-being of societies (Stiglitz *et al.* 2009, Coyle 2014). Yet others have echoed these criticisms and shed light on the historical rise of GDP from a little-known statistic to, arguably, the world's most powerful number (Lepenies 2016, Masood 2016, Schmelzer 2016). The criticisms span a wide range of issues, from environmental depletion to the impact of free digital services on well-being.

Another cluster of literature focuses on one crucial aspect of GDP measurement, namely the production boundary – a conceptual line drawn between economic and non-economic activity. As Coyle (2017, p. 7) describes it, the production boundary ‘distinguishes paid-for activities in the market economy from unpaid activities, which are considered outside the productive sector’. In GDP, ‘what is defined as economic activity is, *literally*, anything deemed to sit inside a designated “production boundary”’ (Christophers 2011, p. 115). With some notable exceptions such as the inclusion of financial services (Christophers 2011, 2013), the production boundary has been one of the most consistent features of GDP methodology (Bos 2009, p. 40). This is certainly true for unpaid household services, which have been excluded for as long as GDP has been in existence. This continuity should not be mistaken for a lack of controversy. On the contrary, the measurement of unpaid work has long been a contentious issue in debates about national accounting, both among economic statisticians as well as in academia and social movements.

The category of unpaid household services corresponds to ‘own-account services’ in the terminology of the SNA. We might think of many of these services alternatively as housework, care work, or domestic labour. This includes activities such as childcare, cleaning, cooking and care for the sick and elderly. Hoskyns and Rai (2007, p. 297) maintain that ‘[w]ithout unpaid services and their depletion being measured and valued, predictions are likely to be faulty, models inaccurate and development policies flawed’. Folbre (2014, p. i130) attributes the lack of effort to measure unpaid services to biases in mainstream economic theory, which in turn ‘shaped the assumptions embedded in national censuses and income accounts’. Since unpaid household services are disproportionately carried out by women (International Labour Organization 2016), failing to measure them introduces a gender bias into economic data and analysis (Waring 1999, Elson 2005, Miranda 2011, Folbre 2014). The problem is particularly acute in developing countries, where the overall amount of time spent on unpaid services is higher (International Labour Organization 2016, p. 20).

According to the International Labour Organization (2018, p. 43), based on time-use data from various years for 64 countries, women spend an estimated three times longer than men per day in unpaid care work. The amount of time spent by women on unpaid care work varies from a maximum of 5 h and 45 min (Iraq) to a low of 2 h and 48 min (Taiwan) with a median of 4 h and 29 min (Austria and Germany) (*ibid.*). Typically, as countries industrialise, a large part of household production shifts to the market (Miranda 2011, p. 6). This shift from non-market to market ‘... translates into a rise in income as measured by income and production aggregates and gives a false impression of an improvement in living standards’ (*ibid.*). A classic example of this phenomenon, which has been variously attributed to several late economists, is that marrying one’s (ostensibly female) cook or housekeeper would lead to a reduction in GDP (Lequiller and Blades 2014, p. 121). This is the case ‘even if, as a wife, her household activities might not have changed or might even have increased’ (Benería 1992, p. 1548).

Moreover, the categories of globally harmonised official statistics – such as formal versus informal, or productive versus unproductive – often make little sense in local contexts that do not resemble developed market economies. Waring (2003, p. 36) demonstrates this point with an example:

The woman goes to collect water. She uses some to wash dishes from the family evening meal (unproductive work) and the pots in which she previously cooked a little food for sale (informal work). Next, she goes to the nearby grove to collect bark for dye for materials to be woven for sale (informal work), which she mixes with half a bucket of water (informal work). She also collects some roots and leaves to make a herbal medicine for her child (inactivity). ... She will also collect some dry wood to build the fire to boil the water to make both the medicine and the dye (active and inactive labour). All this time she will carry the baby on her back (inactive work).

These concerns are nothing new. In fact, they were matters of fundamental concern among early debates over national accounting principles. Reid (1934, p. v), more than eighty years ago, warned that a singular focus on 'that part of our economic system which is organised on a price basis' had blinded economists to productive work of the household, 'our most important economic institution'. Pigou (1920, p. 11), in contrast, argued that national accounts should only include those things that can 'be brought directly or indirectly into relation with the measuring rod of money'. In the postwar period during which national income accounting rose to prominence, some economists argued that it would be impossible to meaningfully compare the economies of industrialised and non-industrialised countries (Dominguez 1947, Frankel 1953).

One of the most prominent issues in these debates was a distinction between the so-called 'money economy' (Ady 1962, p. 52), which can be relatively easily captured in statistics, and more elusive non-monetary or non-market activity (Kuznets 1949, Frankel 1953, pp. 165–6, Rao 1953, pp. 179–87, Samuels 1962, p. 170). This 'countability bias' (Mügge 2019, pp. 9–12) still persists in that goods and services with monetary values (or for which values can easily be imputed) are more readily quantified. Kuznets (1949, p. 206) – widely considered the founding intellectual of GDP – insisted in 1949 that applying the statistical conventions designed for industrialised countries to non-industrialised countries would lead to unacceptable distortions (*ibid.*, p. 211). He argued that '... if national income is to be merely a measure of goods exchanged for money, an estimate had better not be attempted for pre-industrial countries at all' (*ibid.*).

Although the status of unpaid household services in GDP has remained unchanged, the issue has not been ignored entirely. The Social and Gender Statistics section of the UN Statistics Division, for example, has taken a leading role in designing and implementing time-use surveys. Between 2005 and 2015, '75 countries collected time-use statistics through a time-use survey or have included a time-use module in a multipurpose household survey' (United Nations 2015, p. 88). The increased recognition of unpaid household services and 'time poverty' (Bardasi and Wodon 2010) is due in large part to decades of research, theorising and advocacy by feminist economists in response to dominant microeconomic theories about the household and labour markets (e.g. Goetz 1997, Folbre 2009, 2014). Importantly, there is by no means a consensus among feminist scholars that inclusion in GDP is the most desirable way forward for measuring unpaid household services. Esquivel (2011), for example, argues that an overemphasis on the GDP production boundary may be in fact be hindering progress on time-use surveys and other forms of data collection for gender-sensitive policy.

### ***Theorising Change and Continuity in GDP Measurement***

The exclusion of unpaid household services is important to understand in its own right. As a case study, it also adds to a broader understanding of the origins and governance of global statistical standards. The most relevant actors are international organisations (IOs) such as the World Bank, IMF, and UN, as well as expert groups comprised of staff of these IOs. Two strands of literature in particular illuminate how GDP methodology has been shaped by these actors over time. The first is a path-dependency approach that emphasises institutional change or continuity in statistical standards. The other is a constructivist approach that highlights the role of expertise in global governance.

Considering the question from a path-dependency angle highlights the potential for change or continuity in global statistical standards. Hall and Taylor (1996, pp. 939–40) distinguish two broad tendencies within historical institutionalism: a calculus approach and a cultural approach. The calculus

approach assumes that actors adhere to institutions because deviation would lead to worse outcomes than adherence (ibid.). A cultural approach emphasises the taken-for-granted nature of some institutions, which allows them to avoid scrutiny (ibid.). In other words, 'Institutions are resistant to redesign ultimately because they structure the very choices about reform that an individual is likely to make' (ibid.). This is consistent with Hay's (2006, p. 65) description of ideational path-dependency, in which 'it is not just institutions, but the very ideas on which they are predicated and which inform their design and development, that exert constraints on political autonomy'. The focus on shared ideas and norms of statisticians moves the analysis from the relatively rigid assumptions of historical institutionalism (e.g. Mahoney 2000) to a more agent-centred constructivist institutionalism (Hay 2006, 2016; see also Schmidt 2008, 2010 on discursive institutionalism).

Constructivist and expert-centred approaches direct attention to questions of ideas, agency and global governance. Several constructivist studies of IOs (Barnett and Finnemore 2004, Vetterlein 2014, Enns 2015, Broad 2006) demonstrate that IOs are not unitary actors with fixed interests. Rather, individual staff and departments shape IO behaviour (Momani 2007, Ban 2015, Kentikelenis and Seabrooke 2017, Reinold 2017). Statisticians have received little attention as agents within IOs. The statistical departments of IOs are best understood as 'analytic institutions' (Broome and Seabrooke 2012). These are 'the specialist units, departments, committees, adjudicatory bodies and others housed by or linked to IOs that develop the cognitive framework for understanding and solving policy problems' (ibid.). Analytic institutions differ from epistemic communities (Haas 1992) in at least one important respect: 'they are not free-floating or autonomous ... , but institutions endowed with analytical capacities for a programmatic purpose' (ibid., p. 4).

Experts can gain leverage, and even moral authority, from their specialised knowledge and experience (Davis, Kingsbury and Merry 2012, Tsingou 2015, Seabrooke and Tsingou 2016, Seabrooke and Wigan 2016, Ban and Patenaude 2018). Expert knowledge endows IOs with authority over issue areas and allows them to dominate the framing of issues, such as the World Bank on hunger (Sridhar 2007) and poverty (Vetterlein 2012). Enlisting the help of external experts can also enable mission creep into new areas of governance (Littoz-Monnet 2017). Expertise and knowledge are sources of power largely because they are perceived as technical, and thus non-political (Haas 1992). But this perception obscures the deeply political nature of expertise in governance (Sending 2015, Leander and Waever, 2018, Dersnah 2019, Kunz *et al.* 2019). As Desrosières (2000) pointed out, the profession of official statistics is 'at one and the same time, scientific – directed at the production of knowledge – and social – directed at the production of a common language as a foundation for debate on social issues' (ibid., p. 173). The choices made by experts have distributive consequences and are inspired by normative orientations, even if these are not made explicit.

Knowledge is crucial in the constitution of objects in international politics, including 'the economy' itself (Allan 2018). The emergence of the economy as a distinct object, separate from the social and natural world, owes a great deal to the emergence of statistical indicators (Mitchell 2002, 2005, Breslau 2003). In Breslau's (2003, p. 380) words, 'No one has ever seen the economy or touched it except through statistical reports and the conceptual armature of macroeconomics'. Polanyi (2016, p. 400) proposed a similar ontology of economic statistics in the 1922 article 'Socialist Accounting' (*Sozialistische Rechnungslegung*):

History in fact directly points to the inverse relationship of dependence between accounting and economic theory: accounting is historically not a practical application of economic theory; on the contrary, economic theory developed historically through the interpretation, analysis, and systematizing of accounting concepts.

The ambition of statisticians to remain objective in their work does not imply ignorance of the social implications. Official statistics are valuable public goods and there is nothing inherently malicious about them. Ideally, at the domestic level, national statistical systems are independent from central governments in order to prevent manipulation. In this light, the goal of objectivity is laudable. With that said, the potential danger of depoliticisation is that it can mask uneven power relations. By framing problems and solutions as politically neutral, technocratic actors camouflage the

antagonisms and structural inequalities inherent in development issues (Telleria 2017, Petiteville 2018, Rajão and Duarte 2018). Ideas originating from the Global South, including influential ideas related to human development and sustainable development, are deeply influenced by the local contexts and origins of the actors who advocate for them (Acharya 2016). Governance arrangements that remain insulated from ideas originating from a Southern context might ignore local particularities such as structures of work, care and production that differ from those in highly developed countries.

The theoretical approach followed in the analysis below draws from the constructivist institutionalism and expertise literatures as a basis for explaining non-change in the production boundary. Expertise endows statisticians with a high level of autonomy. Yet, the agency of economic statisticians is not distributed equally – those employed by or associated with IOs such as the World Bank and IMF, or with experience working in European and North American bureaucracies, have the most influence. This claim is supported in the following section. The unique governance structure has allowed for a relatively undisturbed path-dependency. In the absence of strong constraints and explicit demands from member states or IO executives, the most important explanatory factor is the consistency over time of ideas about the measurement of unpaid household services.

### **The Global Governors of GDP**

Much of the intellectual groundwork of modern national accounting was laid in the period following World War I (Studenski 1958, Kendrick 1970). Gross National Product (GNP), the predecessor to GDP, first emerged in a small number of industrialised countries in the 1930s and 1940s and attracted the attention of policymakers in part through its role in economic planning during the Second World War (Kendrick 1970). Since then, GDP has become a global institution. Although GDP grabs the most attention, it is only one of many indicators derived from the System of National Accounts (SNA). The SNA is an internationally harmonised ‘set of recommendations on how to compile measures of economic activity in accordance with strict accounting conventions based on economic principles’ (ISWGNA 2008, p. 1). In other words, it is a framework for measuring the total economic activity of a country.

The SNA was first published in 1953, followed by revisions in 1968, 1993, and 2008, with a new revision currently in progress. The length and detail of the SNA has grown substantially over time. Since the disappearance of alternative national accounting systems in post-communist states, it is now the only internationally accepted standard (Herrera 2010, p. 18). The development and revision of the SNA is now carried out by an intersecretariat working group composed of statisticians from five international organisations. Prior to the 1980s, it was carried out by one of these, the United Nations Statistical Office (UNSO, later renamed the United Nations Statistics Division, UNSD).

The UNSO (now UNSD) was formed at the Nuclear Session of the UN Statistical Commission in 1946 (Ward 2004a, pp. 37–8). It emerged out of the League of Nations, and was created in large part to establish harmonised economic statistics in support of Marshall Plan reconstruction (*ibid.*, pp. 43–9). One of the earliest projects of the newly formed Statistical Commission – carried out chiefly by the UNSO – was to draft the first version of the SNA (*ibid.*). At that time, there were only 46 UN member states, most of which were industrialised countries (*ibid.*, p. 6). Over the following decades, the number of member states increased along with the wave of independence and decolonisation in the 1960s. It became more difficult to balance different policy aims in the international statistical system (*ibid.*). Nonetheless, GDP quickly gained a solid foothold in development policy (Speich 2008, pp. 14–21). According to Ward (2004a, p. 7), in the early decades of the UN and the Bretton Woods Institutions, ‘an emerging consensus soon began to drive the development debate’. The concept of full employment was a central goal of all industrial countries and was written into the mandates of the UN, IMF and World Bank. ‘For the developed industrial countries, this objective was viewed as synonymous with poverty reduction, and it accounts for the statistical preoccupation with GNP, growth, and the national accounts’ (*ibid.*).

Since the early 1980s, responsibility for the SNA has been shared between five international agencies in the Intersecretariat Working Group on National Accounts (ISWGNA). The participating agencies are the UNSD, the IMF, the World Bank, the Organisation for Economic Cooperation and Development (OECD) and Eurostat. The ISWGNA was established in part because the costs were becoming too high for the UN alone (Interview with Chief of UNSD Economic Statistics Branch, New York, 2019). The ISWGNA and its members are overseen by the United Nations Statistical Commission, ‘the apex entity of the international community of official statistics’ (ibid.). Despite the importance of collaboration between the five IOs, the SNA is still widely seen as a UN initiative. This is due to the proximity of UNSD to the Statistical Commission and the fact that the SNA was long referred to as the UN System of National Accounts (ibid.).

The ISWGNA is responsible, among other things, for bureaucratic tasks such as planning meetings and deciding who will attend. The meetings, which include a rotating group of country experts in addition to ISWGNA members, are referred to as Expert Group meetings. However, the country experts present at Expert Group meetings have less influence over the content of the SNA than the permanent members for several reasons. For one thing, many of the background documents that are considered during meetings are written by members of the ISWGNA. These members have more time to write these documents compared to country experts, who are typically in charge of national accounts in their own countries (Interview with former ISWGNA member, Edinburgh, 2017). Another reason for this imbalance has to do with language and training.

There’s a bit of a problem, in that efforts are made to make sure it’s regionally diverse. And so you’re trying to include people from Asia, from Africa, from Latin America. That can sometimes be problematic on two counts. The first thing is whether someone would have the same depth of knowledge as some of the others. And there can be a bit of a problem about language. All of this is done in English. And the people who go to meetings in OECD and Eurostat, whether they’re English mother tongue or not, are used to working in that sort of environment. If you have somebody from [another region], they are not quite as comfortable working in English as others. ... So, for both of those reasons, it tends to be the developed countries in the ISWGNA that tend to dominate the discussions. Not exclusively, but to some extent that happens. (ibid.)

The ease of communication for statisticians comfortable with the working language, and the privilege given to a specific body of knowledge – namely, the national accounting practices that originated in the US and UK and evolved in close connection to the UN system – contribute to an uneven distribution of influence. Expert Group meetings do indeed include regionally diverse country experts, and statisticians from developing countries are by no means excluded from these meetings, nor from the international statistical system more broadly. Yet, the permanent members of the ISWGNA and those with experience in European and North American bureaucracies and international organisations do have more agency in the SNA revision process. According to a former ISWGNA member, ‘It is largely, not exclusively, but largely up to the UN, the World Bank and the IMF to speak up for developing countries, to the extent they don’t speak up for themselves’ (Interview with former ISWGNA member, Edinburgh, 2017).

There are very few formal constraints on the ISWGNA. The most straightforward constraint is the mandate of the Statistical Commission, which was not enforced until after the 1993 SNA. After the 1993 revision, which took longer and resulted in much more substantial change than initially planned (Ward 2004b), the Statistical Commission increased its oversight. Now the ISWGNA submits a list of priority issues to the Commission prior to the start of the revision. Once agreed upon, the ISWGNA is mandated to deal only with these issues (Interview with current ISWGNA member, New York, 2019). In the SNA revision process, ISWGNA members work collectively toward producing an updated manual, not as representatives of the missions of their respective organisations. According to a former ISWGNA member, any instances of conflict stemmed from personal convictions rather than pressure to act on behalf of international organisations. For instance, in both the 1993 and 2008 revisions, a representative of Eurostat – the organisation with the most funding of the five – pressured the other members into accepting a change in the SNA by threatening to not approve the final version (Interview with former ISWGNA member, Edinburgh, 2017). In this example,



It's not that there's somebody in Brussels leaning on them to say something. It's basically they want to rule the statistical world – 'we think it's good, therefore it's good for everybody else'. (ibid.)

Nor do the statistical departments of the constituent IOs face any prohibitive external constraints from member states or other actors. According to a former acting director of UNSD, 'Apart from having to comply with all the millions of UN rules, we were pretty independent in our work. I've never noticed any political pressure of any kind. I mean they were just not interfering in contents of handbooks or publications apart from the regular editing process of course' (Interview with former Acting Director of UNSD, Amsterdam, 2017). In this environment of expertise-based autonomy, the ISWGNA has a high degree of latitude to make – or at the very least submit to the Statistical Commission for approval – changes to GDP methodology as its members see fit. The following section traces the choices they made in the 1993 revision with respect to unpaid services.

### **Ideational Path Dependency in the SNA Production Boundary**

Between publications of the SNA, the ISWGNA takes up the complex job of revising the international standards. Out of the three official revisions, the revision process of the 1993 SNA was the period during which unpaid household services was most prominently on the agenda. The topic was not discussed at all in the 2008 revision, and the relevant sections of the 1993 and 2008 SNA manuals are nearly identical. During the revision, which began in 1982 (Vanoli 2005, p. 104), the production boundary was discussed several times in both Expert Group meetings and within the UN Statistical Commission. Ultimately, changes were made to the production boundary. Yet, the changes that were made had the effect of reinforcing the exclusion of unpaid household services while including other activities. The 1993 SNA made these exclusions explicit for the first time, formally cementing this historical idea into the international standards.

This section highlights the choices made with regard to unpaid services and the justifications for these choices given by the ISWGNA. Throughout the process, the problem is clearly recognised by statisticians but changes are rejected. The first part of the section demonstrates the reluctance of national accountants to include unpaid household services in the production boundary. The second part is an analysis of official reports from the 1993 revision process with a focus on the arguments made for the exclusion. These arguments, which ultimately rely upon historical precedent, reflect an undisturbed part-dependency made possible by the autonomy of the ISWGNA (and the UNSO before that).

### ***Outside the Market, Out of Mind: Expert Views on Unpaid Household Services***

The 1993 SNA states that the reluctance of the ISWGNA to include unpaid household services in the SNA production boundary is explained by a combination of factors: the isolation of these activities from markets, the difficulty of estimating monetary values, and 'adverse effects ... on the usefulness of the accounts for policy purposes and the analysis of markets and market disequilibria' (ISWGNA 1993, p. 149). A former ISWGNA member echoed these concerns about valuation, comparability and isolation from markets:

It is an issue that is very topical at the moment. But it's actually been there for decades, lurking around. On the whole and by and large, most national accountants say, we recognise that unpaid housework is really important, but my lord it's difficult to put a value on it. And if we put a value on it, and we added it into GDP, how would you know whether you're doing it consistently over time or making comparisons across countries? It's okay to do it, but could you do it a little bit apart from the main national accounts? (Interview with former ISWGNA member, Edinburgh, 2017)

Not all economic statisticians and data users agree on whether or not GDP should be expanded to include unpaid services. Data users who are interested in national accounts data for administrative purposes tend to prefer a more narrow production boundary for the sake of maximising reliability

and comparability. Those who use the data for economic analysis tend to prefer a more inclusive production boundary.

If you're really fixated by administrative purposes, especially on a cross-country basis, you might prefer to leave out the informal part, so that you can more strictly compare one country to another. But if you're interested in a time series then, in the sense of doing economic policy analysis, you might well say, 'well I'd sooner have a bad estimate of something than no estimate'. So, this trade-off between the two is quite problematic. And I think that is fundamental of where we're at at the moment. (Interview with former ISWGNA member, Edinburgh, 2017)

A national accounting expert at the Economic Statistics Branch of UNSD made similar remarks. According to the interviewee, debates about potential revisions to GDP measurement often come down to the question of 'what's the purpose?'

My view, and it may be a bit of a conservative view or a narrow view, is that there's one key reason why nation states invest in something like the national accounts. And to me that's primarily because they care about employment and they care about taxation. And the national accounts allows them to model and forecast and, you know, look at the relationships that lead to both of those. So, volume growth in GDP is strongly tied to employment outcomes. Current price GDP, probably tied to taxation. ... The informal economy, the household sector, they're important to understand for other reasons, but you're not going to be designing your monetary or fiscal policy to impact on those, and in fact there's going to be very little government policy that is directly targeted at changing those. (Interview with UNSD statistician, New York, 2019)

This divide was also apparent at a 2015 conference in Paris, hosted by the OECD and the International Association for Research in Income and Wealth, called 'W(h)ither the SNA?'. While most participants supported an expansion of GDP, a 'significant minority of people' emphasised the difficulty of implementing such changes and the increased demands it would place on national accountants (Interview with former ISWGNA member, Edinburgh, 2017). The latter were those concerned with the policy applications of the data.

If you're the Ministry of Finance, for example, it doesn't matter what you're doing with housework. You can't tax housework, and so, and so there was quite a tension there. But a lot of, mostly the people who were defending the status quo were people who were concerned with administrative uses. And the people who wanted the massive expansion were the ones who wanted to do analysis. That's a bit simplified, but not much. (ibid.)

These practical arguments – which include isolation from markets, data collection and valuation challenges, reliability and comparability, and policy applications – reflect professional norms that place high value on the reliability and comparability of official statistics. Yet, they also coincide with state interests in employment, fiscal and monetary policies. Because household services and care work are not imagined as productive work, they are not considered relevant for these policy areas. In contrast, feminist economists have convincingly demonstrated that gender gaps – including in unpaid work – have far-reaching effects on macroeconomic outcomes (Seguino 2019). Furthermore, whereas attempts have been made to incorporate other sectors and activities that are hard to measure, no such effort was made for unpaid household services. The informal sector, for example, is difficult to measure directly and current data rely heavily on estimates (International Labour Organization 2013, p. 244), yet it has been inside the SNA production boundary since 1993. And imputations are applied in other areas of the SNA, notably financial services and owner-occupied housing. In contrast, recent innovations toward measuring and valuing unpaid household services (such as time-use surveys) have primarily gone on outside of national accounting and on a comparatively limited scale.

### ***The Household Sector in the 1993 SNA Revision***

The report of the 1981 Statistical Commission session recognises the need to reconsider the household sector, as the following passage indicates:

For most developed countries, [imputations for non-market activity] are of relatively minor significance in present estimates of the gross domestic product (GDP). For developing countries, however, they may be much more

important. For both developed and developing countries, furthermore, there are demands for new kinds of imputations beyond those presently included in the gross domestic product. (UNSC 1981, p. 12)

But a cautious attitude prevailed, as several delegates expressed ‘a strong resistance to losing sight of the transactions-oriented base [of the SNA], not only because its data are likely to be relatively much firmer but also because market transactions are often the vehicle for government actions’ (UNSC 1981, pp. 12–13).

The SNA states that the biggest problem in determining the activities included in the production account is deciding how to treat ‘... activities that produce goods or services that could have been supplied to others on the market but are actually retained by their producers for their own use’ (ISWGNA 2008, p. 6). One of these grey areas is own-account production, which includes activities such as subsistence farming. Another is own-account *services*, a category that includes ‘the preparation of meals, care and training of children, cleaning, repairs, etc.’ (ibid.). The 1993 SNA confirmed the inclusion of own-account goods and added some activities (including water collection and repairs to buildings) inside the production boundary on these grounds (Harrison 2005, p. 150<sup>2</sup>). Services, in contrast, were explicitly excluded.

Two main discursive justifications for this exclusion emerge from reports of the ISWGNA and the UN Statistical Commission during the 1993 revision process. The first justification can be labelled the ‘market criterion’. The second is a distinction between non-market goods and non-market services – a distinction that is in many respects arbitrary but leaves no ambiguity about the status of these services. These two ‘lines of defence’ are both applied – sometimes quite explicitly – in expert deliberation during the revision process leading to the 1993 SNA.

The first line of defence is the market criterion. The market criterion is equivalent to what is often called the ‘third party criterion’. The third party criterion is derived from Margaret Reid’s definition of household production as consisting of unpaid activities that could conceivably be delegated to a paid worker or replaced by market goods (Reid 1934, p. 11). Along similar lines, Benham (1953, p. 173) reasoned that if we ‘... can find another economy, with markets, where consumption patterns are very similar, why not price the goods and services at the prices ruling in the latter?’. This position had become a professional consensus among economic statisticians by the early 1970s (Sakuma 2013, p. 5F56). To the third party criterion, Wood (1997) adds an additional ‘first world criterion’. Wood argues that a nonmarket activity is only considered productive if it is bought and sold in developed market economies. The market criterion in this analysis comprises both the third party and first world criteria.<sup>3</sup>

The market criterion is evident in the report of the 1981 Statistical Commission. The report acknowledges that ‘[t]he distinction between what is considered to be subsistence output and what is not is essentially an arbitrary one. It reflects mainly the traditional limits of marketed output in developed countries’ (UNSC 1981, p. 14). The market criterion is also implied in the SNA’s definition of production:

All goods and services produced as outputs must be such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge. The SNA includes within the production boundary all production actually destined for the market, whether for sale or barter. (ISWGNA 1993, p. 5, ISWGNA 2008, p. 6)

The second justification is the distinction between household goods and household services. The production boundary of the 1968 SNA included some primary products for own consumption, such as the goods processed from agricultural or mining products, but excluded services (except for housing repairs by owner-occupiers) (Chadeau 1992, p. 87). In the 1993 SNA, it expanded to include *all* goods produced by households for their own consumption but continued to exclude services, ‘except for housing services produced by owner-occupiers of dwellings, and storage which is considered as an extension of the goods production process’ (ibid.).

In a 1987 Expert Group meeting, the ISWGNA discussed several possible changes to the production boundary. These include the issues of how to value subsistence agricultural goods, how to

classify repairs to buildings, how to treat water collection, and the activities of midwives and funerals (Harrison 2005, pp. 150–1). The discussion resulted in a few changes to the production boundary. Two of these in particular – water collection and midwives and funerals (discussed as a single topic) – illustrate the goods-services distinction. Water collection was moved inside the production boundary based on the argument that it ‘should be treated as the production of a good (that is making the water available where it is needed)’ (ibid.). Regarding midwives and funerals, the expert group decided that, as services, neither should be moved within the production boundary.

These choices were based on convention rather than strict criteria. ‘In general it was not felt possible to have a single succinct definition of the production boundary that would explain why some items were included and some excluded ...’ (Harrison 2005, p. 148). To get around this ambiguity, the ISWGNA decided ‘to give fairly general indications followed by specific lists of examples that would make clear where the boundary should be drawn’ (ibid.). Such a list appears in the SNA (ISWGNA 1993, p. 149):

- (1) The cleaning, decoration and maintenance of the dwelling occupied by the household including small repairs of a kind usually carried out by tenants as well as owners;
- (2) The cleaning, servicing and repair of household durables or other goods, including vehicles used for household purposes;
- (3) The preparation and serving of meals;
- (4) The care, training and instruction of children;
- (5) The care of sick, infirm or old people;
- (6) The transportation of members of the household or their goods

These activities were explicitly excluded, and remain so in the most recent version of the SNA. In making these choices, statisticians relied on historical precedent, noting that ‘the only extensions to the production boundary previously accepted are for the production of goods’ (Harrison 2005, p. 150). Services provided within the household, on the other hand, ‘are always immediately consumed by those producing them and therefore do not add to the pool of goods and services available for redistribution’ (ibid.).

As several scholars have pointed out (e.g. Wood 1997, Waring 2003), neither of these lines of reasoning – the market criterion nor the goods-services distinction – are consistently applied. For instance, washing clothes or taking care of children can be (and frequently are) done by paid domestic workers and day care centres (Wood 1997, p. 51). Likewise, there is nothing inherent in services that makes them any less productive than goods. It was not until the 1993 SNA that services were given a strict statistical definition (ISWGNA 1993, p. 148, Broussolle 2015, p. 574). Services were a major topic in the 2008 SNA, given the growing importance of, among others, digital services, financial services and intellectual property. The 2008 SNA introduced several clarifications to the definition of services, which had the paradoxical effect of further blurring the goods-services distinction<sup>4</sup> (Broussolle 2015). The distinction between non-market goods and services is especially arbitrary in the context of a subsistence household (Waring 2003, p. 36).

## Summary

The first part of this section shows that not all statisticians and users of national accounts data agree on the exclusion of unpaid household services from the SNA production boundary. The arguments given by national accountants with direct involvement in standard-setting are grounded in practical concerns such as data collection challenges, international comparability, and policy applications. Yet, the decades-long history of contestation surrounding the issue makes clear that even a practical and technocratic framing is deeply political. And, because nearly all of the excluded activities are performed by women, the technocratic framing covers up deeply gendered ideas regarding what constitutes productive work and what does not. When the exclusion was clarified in the 1993 SNA, it was

justified with reference to the choices that had been made in the previous SNA manuals starting in 1953. This ideational path-dependency is only possible because of the hands-off global governance of the SNA.

## Concluding Remarks

Throughout its history, from the UNSO to the ISWGNA, GDP has been the domain of a small group of economic statisticians. The technical nature of international statistical standards is a source of power for statisticians employed by IOs and those with experience in international bureaucracies originating in the Global North – even if these statisticians do not perceive their work as political. This form of governance is largely insulated both from interests of outside actors and from competing ideas, particularly ideas from the field of feminist economics. This leaves decisions about GDP methodology in the hands of experts with shared norms (about the quality of official statistics) and ideas (about the boundaries of markets).

Although the treatment of unpaid household services in the SNA has been unchanged until now, this does not mean that change is impossible in the future. As indicated in the interview passages and commentary above, statisticians are aware of the criticisms and tend to be sympathetic. Increased public debate about GDP could reduce the insulation of experts from competing ideas. Moreover, innovations in data collection, such as the use of big data, could offer solutions to some of the practical barriers. The current SNA revision began with the 50th session of the UN Statistical Commission in March 2019. The key issues, which make up the mandate for the next manual, are globalisation, digitalisation, well-being, and sustainability (ISWGNA 2018, p. 3). Whether or not unpaid household services is deemed to fall under the category of well-being remains to be seen. Considering that the topic was not on the agenda of the previous revision, it is not likely to return in the near future. In the longer term, however, there are no immovable barriers to major changes. It is also conceivable that GDP will become less influential as alternative indicators receive more attention (Fioramonti 2017).

From GDP figures to the Sustainable Development Goals and corruption indices, numbers and rankings shape global politics in important ways. The origins of these numbers and the governance of the international statistical system have largely been neglected. The example of unpaid services in GDP shows that statisticians, due to their expertise, possess a great deal of agency over global standards for economic measurement. While this agency allows for institutional change, continuity often prevails. Professional norms and shared ideas remain important drivers of stability in the way economies are quantified. As Ward (2004b, p. 300) observed, 'The adoption of the SNA assumes there is a standard underlying economic model that serves all countries equally'. This assumption has effectively marginalised large amounts of women's work, as feminist scholars have shown. GDP has far outgrown its role as an indicator of physical output in mid-twentieth century North America and Western Europe. As such, it is often expected to tell us a great deal more about social and economic progress and performance than it is capable of doing. Yet, as long as this figure remains so important in public life, its biases and shortcomings will lead to distortions in the way we see the economy.

## Notes

1. I use the term 'unpaid household services' throughout to refer a range of activities (specified on p. 14 of this article) performed by households for their own use. While other terms with clear political connotations are available, these alternatives are either too broad or too restrictive. For example, 'unpaid work' and 'unpaid labour' are unsuitable in this context because several forms of unpaid work are included in GDP. 'Domestic labour' and 'care work' both have the advantage of emphasising the gendered character of the work, but arguably leave out some of the activities in question, such as transportation and minor home repairs. The term 'unpaid work' is used occasionally in the article in reference to a broader category of activities including, for example, subsistence agriculture.
2. From ISWGNA Expert Group meeting on the Household Sector, September 1987, Florence, Italy. The document *The Background to the 1993 Revision of the System of National Accounts*, edited by Anne Harrison (2005), is an annotated collection of all reports from the 13 Expert Group meetings of the ISWGNA between 1986 and 1983.

3. While the third party criterion is accepted among statisticians, the third world criterion is a critique made by Wood (1997) and not acknowledged by statisticians. The third world criterion is useful in this context because it highlights the persistence of neo-colonial modernisation theory in development policy.
4. Among the changes to the definitions of services in the 2008 SNA is the distinction between change-effecting services and margin-services (ISWGNA 2008, pp. 96–7, Broussolle 2015, pp. 575–6). The 2008 SNA (ISWGNA 2008, pp. 96–7) lists several examples of change-effecting services, including: transportation, cleaning, repairs, healthcare, providing accommodation, improving one's appearance, education, entertainment, and providing advice and information. Notably, all of these activities are excluded from GDP when no money is exchanged, but are explicitly listed as examples of productive services.

## Acknowledgements

This research is part of the FICKLEFORMS project at the University of Amsterdam. I am grateful to the team members, department colleagues and anonymous reviewers for their close reading and insightful comments.

## Disclosure Statement

No potential conflict of interest was reported by the author.

## Funding

This work was supported by the European Research Council under the European Union's Seventh Framework Programme [FP/2007-2013]/H2020 European Research Council (ERC) [Grant Agreement number 637683].

## Notes on Contributor

**Daniel DeRock** is a PhD candidate in the political science department of the University of Amsterdam. He is currently researching the global governance of economic and social indicators.

## References

- Acharya, A., 2016. Idea-shift: how ideas from the rest are reshaping global order. *Third World Quarterly*, 37 (7), 1156–70.
- Ady, P., 1962. Use of National Accounts in Africa. *Review of Income and Wealth*, 1, 52–65.
- Allan, B., 2018. From subjects to objects: knowledge in international relations theory. *European Journal of International Relations*, 24 (4), 841–64.
- Ban, C., 2015. Austerity versus stimulus? Understanding fiscal policy change at the International Monetary Fund since the great recession. *Governance*, 28 (2), 167–83.
- Ban, C. and Patenaude, B., 2018. The professional politics of the austerity debate: a comparative field analysis of the European Central Bank and the International Monetary Fund. *Public Administration*, 2019, 1–16.
- Bardasi, E. and Wodon, Q., 2010. Working long hours and having no choice: time poverty in Guinea. *Feminist Economics*, 16 (3), 45–78.
- Barnett, M. and Finnemore, M., 2004. *Rules for the world: international organizations in global politics*. Ithaca: Cornell University Press.
- Benería, L., 1992. Accounting for women's work: the progress of two decades. *World Development*, 20 (11), 1547–60.
- Benham, F., 1953. Income and product in under-developed countries: comments on the paper by Professor Frankel. *Review of Income and Wealth*, 3 (1), 169–77.
- Bos, F., 2009. *The national accounts as a tool for analysis and policy: history, economic theory and data compilation issues* [online]. Munich Personal RePEc Archive. Available from: [mpra.ub.uni-muenchen.de/23582/](http://mpra.ub.uni-muenchen.de/23582/).
- Breslau, D., 2003. Economics invents the economy: mathematics, statistics, and models in the work of Irving Fisher and Wesley Mitchell. *Theory and Society*, 32, 379–411.
- Broad, R., 2006. Research, knowledge, and the art of 'paradigm maintenance': the World Bank's development economics Vice-Presidency (DEC). *Review of International Political Economy*, 13 (3), 387–419.
- Broome, A. and Seabrooke, L., 2012. Seeing like an international organisation. *New Political Economy*, 17 (1), 1–16.
- Broussolle, D., 2015. The emerging new concepts of services in the system of national accounts and the balance of payments. *Review of Income and Wealth*, 61 (3), 573–86.
- Chadeau, A., 1992. What is households' non-market production worth? *OECD Economic Studies*, 18, 85–103.
- Christophers, B., 2011. Making finance productive. *Economy and Society*, 40 (1), 112–40.
- Christophers, B., 2013. *Banking across boundaries*. Hoboken: Wiley-Blackwell.

- Coyle, D., 2014. *GDP: a brief but affectionate history*. Princeton: Princeton University Press.
- Coyle, D. 2017. Do-it-yourself digital: the production boundary and the productivity puzzle. ESCoE Discussion Paper 2017-01 (June), Economic Statistics Centre of Excellence.
- Davis, K., Kingsbury, B., and Merry, S., 2012. Indicators as a technology of global governance. *Law & Society Review*, 46 (1), 71–104.
- Dersnah, M., 2019. United Nations gender experts and the push to focus on conflict-related sexual violence. *European Journal of Politics and Gender*, 2 (1), 41–56.
- Desrosières, A., 2000. Measurement and its uses: harmonization and quality in social statistics. *International Statistical Institute*, 68 (2), 173–87.
- Dominguez, L., 1947. National income estimates of Latin-American countries. In: *Conference on research in income and wealth, studies in income and wealth*. Cambridge, MA: National Bureau of Economic Research, 160–244.
- Elson, D. 2005. Unpaid work, the Millennium Development Goals, and capital accumulation: notes for a presentation. *Conference on Unpaid Work and the Economy: Gender, Poverty and the Millennium Development Goals*, 1–3 October 2005 Annandale-on-Hudson, 1–12.
- Enns, C., 2015. Knowledges in competition: knowledge discourse at the World Bank during the knowledge for development era. *Global Social Policy: An Interdisciplinary Journal of Public Policy and Social Development*, 15 (1), 61–80.
- Esquivel, V., 2011. Sixteen years after Beijing: what are the new policy agendas for time-use data collection? *Feminist Economics*, 17 (4), 215–38.
- Fioramonti, L., 2013. *Gross domestic problem: the politics behind the world's most powerful number*. London: Zed Books.
- Fioramonti, L., 2017. *The world after GDP*. Cambridge: Polity Press.
- Folbre, N., 2009. *Greed, lust, and gender: a history of economic ideas*. New York: Oxford University Press.
- Folbre, N., 2014. The care economy in Africa: subsistence production and unpaid care. *Journal of African Economies*, 23, i128–56.
- Frankel, S., 1953. Concepts of income and welfare in advanced and under-developed societies with special reference to the intercomparability of national income estimates. *Review of Income and Wealth*, 3, 156–68.
- Goetz, A.M., 1997. *Getting institutions right for women*. London: Sage.
- Haas, P., 1992. Introduction: epistemic communities and international policy coordination. *International Organization*, 46 (1), 1–35.
- Hall, P. and Taylor, R., 1996. Political science and the three new institutionalisms. *Political Studies*, 44 (5), 952–73.
- Harrison, A., ed., 2005. *The background to the 1993 revision of the System of National Accounts* [online]. Available from: [unstats.un.org/unsd/sna1993/history/backgrd.pdf](http://unstats.un.org/unsd/sna1993/history/backgrd.pdf).
- Hay, C., 2006. Constructivist institutionalism. In: R. Rhodes, S. Binder, and B. Rockman, ed. *The Oxford Handbook of political institutions*. Oxford: Oxford University Press, 56–74.
- Hay, C., 2016. Good in a crisis: the ontological institutionalism of social constructivism. *New Political Economy*, 21 (6), 520–35.
- Herrera, Y., 2010. *Mirrors of the economy: national accounts and international norms in Russia and beyond*. Ithaca: Cornell University Press.
- Hoekstra, R., 2019. *Replacing GDP by 2030: towards a common language for the well-being and sustainability community*. Cambridge: Cambridge University Press.
- Hoskyns, C. and Rai, S.M., 2007. Recasting the global political economy: counting women's unpaid work. *New Political Economy*, 12 (3), 297–317.
- International Labour Organization, 2013. *Measuring informality: a statistical manual on the informal sector and informal employment*. Geneva: ILO.
- International Labour Organization, 2016. *Women at work: trends 2016*. Geneva: ILO.
- International Labour Organization, 2018. *Care work and care jobs for the future of decent work*. Geneva: ILO.
- Intersecretariat Working Group on National Accounts (ISWGNA), 1993. *System of national accounts 1993*. Washington, DC: Inter-Secretariat Working Group on National Accounts.
- Intersecretariat Working Group on National Accounts (ISWGNA), 2008. *System of national accounts 2008*, Washington, DC: Inter-Secretariat Working Group on National Accounts.
- Intersecretariat Working Group on National Accounts (ISWGNA). 2018. Report of the intersecretariat working group on National Accounts. Statistical Commission Items for Discussion and Decision, E/CN.3/201.
- Kendrick, J., 1970. The historical development of national-income accounts. *History of Political Economy*, 2 (2), 284–315.
- Kentikelenis, A.E. and Seabrooke, L., 2017. The politics of world polity: script-writing in international organizations. *American Sociological Review*, 82 (5), 1065–92.
- Kunz, R., Prügl, E., and Thompson, H., 2019. Gender expertise in global governance: contesting the boundaries of a field. *European Journal of Politics and Gender*, 2 (1), 23–40.
- Kuznets, S., 1949. National income and industrial structure. *Econometrica*, 17, 205–41.
- Leander, A. and Waever, O., 2018. *Assembling exclusive expertise: knowledge, ignorance and conflict resolution in the global South*. London: Routledge.
- Lepenes, P., 2016. *The power of a single number: the political history of GDP*. New York: Columbia University Press.
- Lequiller, F. and Blades, D., 2014. *Understanding national accounts: second edition*. Paris: OECD Publishing.

- Littoz-Monnet, A., 2017. Expert knowledge as a strategic resource: international bureaucrats and the shaping of bioethical standards. *International Studies Quarterly*, 61, 584–95.
- Mahoney, J., 2000. Path dependence in historical sociology. *Theory and Society*, 29, 507–48.
- Masood, E., 2016. *The great invention: the story of GDP and the making and unmaking of the modern world*. New York: Pegasus Books.
- Miranda, V., 2011. Cooking, caring and volunteering: unpaid work around the world. *OECD Social, Employment and Migration Working Papers*, no. 116. Paris: OECD Publishing, 1–40.
- Mitchell, T., 2002. *Rule of experts: Egypt, techno-politics, modernity*. Berkeley: University of California Press.
- Mitchell, T., 2005. The work of economics: how a discipline makes its world. *European Journal of Sociology*, 46 (2), 297–320.
- Momani, B., 2007. IMF staff: missing link in fund reform proposals. *Review of International Organizations*, 2 (1), 39–57.
- Morgan, M., 2009. Seeking parts, looking for wholes. *History of Observation in Economics Working Paper Series*, 1. Amsterdam: University of Amsterdam, 1–56.
- Mügge, D., 2016. Studying macroeconomic indicators as powerful ideas. *Journal of European Public Policy*, 23 (3), 410–27.
- Mügge, D., 2019. International economic statistics: biased arbiters in global affairs? *Fudan Journal of the Humanities and Social Sciences*, 1–20. doi.org/10.1007/s40647-019-00255-5.
- Petteville, F., 2018. International organizations beyond depoliticized governance. *Globalizations*, 15 (3), 301–13.
- Philipsen, D., 2015. *The little big number: how GDP came to rule the world and what to do about it*. Princeton: Princeton University Press.
- Pigou, A.C., 1920. *The economics of welfare*. London: Macmillan Press.
- Pilling, D., 2018. *The growth delusion: wealth, poverty, and the well-being of nations*. New York: Tim Duggan Books.
- Polanyi, K., 2016. 'Socialist accounting' [Sozialistische Rechnungslegung] by Karl Polanyi: with preface 'Socialism and the embedded economy' (Fischer, A., Woodruff, D., and Bockman, J., Trans). *Theory and Society*, 45, 385–427. (Original work published 1922).
- Rajão, R. and Duarte, T., 2018. Performing postcolonial identities at the United Nations' climate negotiations. *Postcolonial Studies*, 21 (3), 364–78.
- Rao, R.K.R.V., 1953. Some reflections on the comparability of real national incomes of industrialised and under-developed countries. *Review of Income and Wealth*, 3, 178–210.
- Reid, M., 1934. *Economics of household production*. New York: J. Wiley & Sons.
- Reinold, T., 2017. The path of least resistance: mainstreaming 'social issues' in the International Monetary Fund. *Global Society*, 31 (3), 392–416.
- Sakuma, I., 2013. The production boundary reconsidered. *Review of Income and Wealth*, 59 (3), 556–67.
- Samuels, L.H., 1962. The uses and limitations of national economic accounting, with special reference to South Africa. *Review of Income and Wealth*, 1, 162–81.
- Schmelzer, M., 2016. *The hegemony of growth: The OECD and the making of the economic growth paradigm*. Cambridge: Cambridge University Press.
- Schmidt, V., 2008. Discursive institutionalism: the explanatory power of ideas and discourse. *Annual Review of Political Science*, 11, 303–26.
- Schmidt, V., 2010. Taking ideas and discourse seriously: explaining change through discursive institutionalism as the fourth 'new institutionalism'. *European Political Science Review*, 2 (1), 1–25.
- Seabrooke, L. and Tsingou, E., 2016. Bodies of knowledge in reproduction: epistemic boundaries in the political economy of fertility. *New Political Economy*, 21 (1), 69–89.
- Seabrooke, L. and Wigan, D., 2016. Powering ideas through expertise: professionals in global tax battles. *Journal of European Public Policy*, 23 (3), 357–74.
- Seguino, S., 2019. Engendering macroeconomic theory and policy. *Feminist Economics*, 0 (0), 1–35. doi:10.1080/13545701.2019.1609691.
- Sending, O., 2015. *The politics of expertise: competing for authority in global governance*. Ann Arbor: University of Michigan Press.
- Speich, D., 2008. Travelling with the GDP through early development economics' history. *Working Papers on The Nature of Evidence: How Well Do 'Facts' Travel?*, 33/08. London: London School of Economics, 1–33.
- Sridhar, D., 2007. Economic ideology and politics in the World Bank: defining hunger. *New Political Economy*, 12 (4), 499–516.
- Stiglitz, J., Sen, A., and Fitoussi, J., 2009. *Report by the commission on the measurement of economic performance and social progress*. Paris: Commission on the Measurement of Economic Performance and Social Progress.
- Studenski, P., 1958. *The income of nations: theory, measurement and analysis past and present*. New York: New York University Press.
- Telleria, J., 2017. Power relations? What power relations? The depoliticising conceptualisation of development of the UNDP. *Third World Quarterly*, 38 (9), 2143–58.
- Tsingou, E., 2015. Club governance and the making of global financial rules. *Review of International Political Economy*, 22 (2), 225–56.
- United Nations, 2015. *The world's women 2015: trends and statistics*. New York: United Nations, Department of Economic and Social Affairs, Statistics Division.



- United Nations Statistical Commission (UNSC). 1981. *Report on the 21st Session* [online]. Available from: <https://unstats.un.org/unsd/statcom/reports/>.
- Vanoli, A., 2005. *A history of national accounting*. Amsterdam: IOS Press.
- Vetterlein, A., 2012. Seeing like the World Bank on poverty. *New Political Economy*, 17 (1), 35–58.
- Vetterlein, A., 2014. The discursive power of international organisations. In: D. Béland, and K Petersen, ed. *Analysing social policy concepts and language*. Bristol: Bristol University Press, 101–26.
- Ward, M., 2004a. *Quantifying the world: UN ideas and statistics*. Bloomington: Indiana University Press.
- Ward, M., 2004b. Some reflections on the 1968-93 SNA revision. *Review of Income and Wealth*, 50 (2), 299–313.
- Waring, M., 1999. *Counting for nothing: what men value and what women are worth*. 2nd ed. Toronto: University of Toronto Press.
- Waring, M., 2003. 'Counting for something! Recognizing women's contribution to the global economy through alternative accounting systems. *Gender and Development*, 11 (1), 35–43.
- Wood, C., 1997. The first world/third party criterion: a feminist critique of production boundaries in economics. *Feminist Economics*, 3 (3), 47–68.