

## Box 2 Methodology underlying South Africa's merchandise trade statistics<sup>1</sup>

Merchandise trade is an important part of the current account<sup>2</sup> of the balance of payments.<sup>3</sup> The South African Reserve Bank (SARB) is responsible for the compilation and publication of the *current account of the balance of payments*<sup>4</sup> and numerous balance of payments statistical tables in the *Quarterly Bulletin*.<sup>5</sup> The quarterly statistics in the current account press release and on page S–84 of this *Quarterly Bulletin* are seasonally adjusted and annualised, whereas those on page S–83 are not seasonally adjusted or annualised.

The SARB sources merchandise trade data at current prices from the South African Revenue Service (SARS), while data on net gold exports are compiled by the SARB. The SARS customs data are compiled in accordance with the *International Merchandise Trade Statistics: Concepts and Definitions (IMTS 2010) manual*,<sup>6</sup> and the monthly data releases incorporate vouchers of correction for the preceding months.

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- 1 Merchandise trade statistics comprise both imports and exports of goods, including net gold exports, which render the trade balance. The goods traded are recorded at 'free on board' value, in other words excluding the cost of transportation and insurance services. These goods are physically visible produced items over which ownership rights can be established and where the economic ownership can be passed from one institutional unit to another by engaging in transactions. The trade balance is the value of merchandise and net gold exports minus the value of merchandise imports.
  - 2 The current account of the balance of payments shows transactions of both goods and services as well as primary and secondary income.
  - 3 The balance of payments is the statistical summary of transactions between residents and non-residents during a specific period.
  - 4 See <http://www.resbank.co.za/Publications/Detail-Item-View/Pages/Publications.aspx?sarweb=3b6aa07d-92ab-441f-b7bf-bb7dfb1bedb4&sarblast=21b5222e-7125-4e55-bb65-56fd3333371e&sarbitem=9464> or <http://www.resbank.co.za/Publications/QuarterlyBulletins/Pages/Current-Account-Release.aspx>
  - 5 See <http://www.resbank.co.za/Publications/QuarterlyBulletins/Pages/QuarterlyBulletins-Home.aspx>
  - 6 See <https://www.un.org/en/development/desa/publications/international-merchandise-trade-statistics-concepts-and-definitions-2010-imts-2010.html>

## Merchandise trade statistics, second quarter of 2019

R millions

	SARS	SARB <i>Quarterly Bulletin</i> page S-83	Stats SA	SARB <i>Quarterly Bulletin</i> page S-84 and statistical press release
	Customs data	SARB-adjusted, but not seasonally adjusted or annualised	SARB-adjusted, seasonally adjusted by Stats SA	SARB-adjusted, seasonally adjusted and annualised by Stats SA
Exports of goods.....	321 816	323 862	320 727	1 282 908
Merchandise exports (free on board) .....	309 339	311 383	308 247	1 232 990
Net gold exports .....	12 476	12 479	12 479	49 918
Merchandise imports (free on board).....	320 778	319 698	328 669	1 314 678
Trade balance (goods).....	1 037	4 164	-7 942	-31 770

Components may not add up to totals due to rounding off.

Sources: SARS, Stats SA and SARB

The SARS customs data are adjusted by the SARB to account for an important conceptual difference, namely that SARS records goods entering and exiting South Africa whereas the SARB's trade statistics record the change of ownership between residents and non-residents in accordance with the guidelines of the *Balance of Payments and International Investment Position Manual – Sixth Edition (BPM6)*.<sup>7</sup>

The conversion from customs data to balance of payments merchandise trade statistics requires adjustments for: coverage of goods that should be either included or excluded; timing, to ensure measurement when the goods changed ownership; valuation, to correct for goods not recorded at market value; and classification, when items in the customs data should be reflected elsewhere in the balance of payments. Most of the balance of payments adjustments are related to the coverage of crude oil, postal trade, electricity, and goods procured in ports.

### The role of statistical agencies in merchandise trade statistics

Customs data (current prices)	Balance of payments adjustments (current prices)	Seasonal adjustment (current prices)	Constant prices*	Deflators
SARS	SARB	Stats SA	Stats SA	Stats SA

\* Including services. See page S-115 of this *Quarterly Bulletin*, available at <http://www.resbank.co.za/Publications/QuarterlyBulletins/Pages/Quarterly-Bulletin.aspx>

<sup>7</sup> The methodology used to compile balance of payments statistics adheres to the guidelines of the *Balance of Payments and International Investment Position Manual – Sixth Edition (BPM6)* of the International Monetary Fund (IMF), available at [www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf](http://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf)

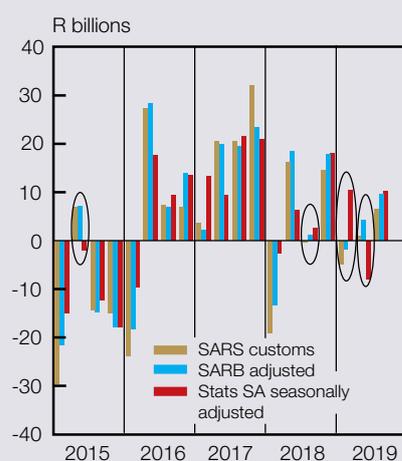
Following the SARB's balance of payments adjustments, Statistics South Africa (Stats SA) seasonally adjusts<sup>8</sup> the nominal values of exports and imports separately at a detailed disaggregated level and converts them to constant values<sup>9</sup> (at 2010 prices) for inclusion in the compilation of expenditure on gross domestic product (GDP) (see pages S-114 and S-115 of this *Quarterly Bulletin*). The seasonal adjustment identifies and removes recurring seasonal fluctuations and calendar effects to reveal the underlying movements such as cyclical turning points, the trend cycle and the irregular component.

An important and, at times, recurring observation is the difference in the sign of the trade balance at current prices of the SARS customs data compared to the official seasonally adjusted Stats SA statistics, as was the case in the second quarter of 2015, the third quarter of 2018, and again in both the first and the second quarter of 2019. The data in the dark grey area in the table reflect this phenomenon in the second quarter of 2019, when the SARS trade surplus of R1.0 billion switched to an official Stats SA seasonally adjusted trade deficit of R7.9 billion.

The differences in the trade balance, as published by SARS and the SARB respectively, only reflect balance of payments adjustments. These had previously contributed to a switch in the sign on only one occasion during the period under review, namely in the third quarter of 2018. On balance, these adjustments are mostly small, and amounted to an average of 1.0% of exports, including gold, and an average of 0.8% of imports between the first quarter of 2015 and the third quarter of 2019. The few more material differences, such as those in the first quarter of 2016 and in the fourth quarter of 2017, mainly reflected adjustments to high-value items such as crude oil. The seasonal adjustment of exports and imports of goods also often explains most of the difference in the trade balance as measured by SARS and Stats SA.

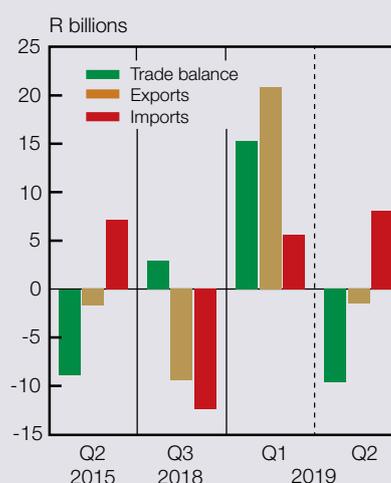
An analysis of the differences between Stats SA statistics (i.e. the trade balance, exports and imports) and SARS customs data shows that the difference in exports contributed significantly to the reversion of the SARS trade deficit in the first quarter of 2019, to a surplus in the official trade balance. Conversely, the difference in imports contributed most to the reversion of the SARS trade surplus in the second quarter of 2019, to a deficit in the official trade balance.

**Trade balance**



Sources: SARS, Stats SA and SARB

**Difference between Stats SA and SARS**

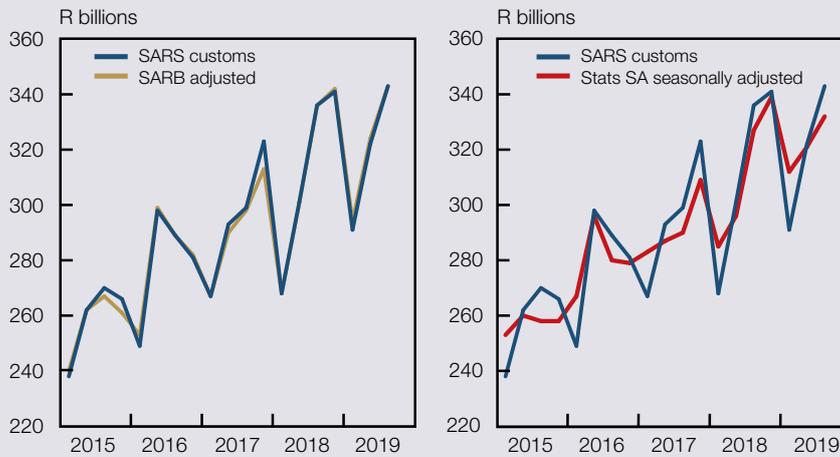


<sup>8</sup> See page 77 of *Expenditure on Gross Domestic Product: Sources and Methods*, available at [http://www.statssa.gov.za/publications/P0441/Expenditure\\_on\\_GDP\\_Sources\\_and\\_Methods.pdf](http://www.statssa.gov.za/publications/P0441/Expenditure_on_GDP_Sources_and_Methods.pdf)

<sup>9</sup> See page 74 of *Expenditure on Gross Domestic Product: Sources and Methods*, available at [http://www.statssa.gov.za/publications/P0441/Expenditure\\_on\\_GDP\\_Sources\\_and\\_Methods.pdf](http://www.statssa.gov.za/publications/P0441/Expenditure_on_GDP_Sources_and_Methods.pdf)

In the case of exports, the limited impact of the SARB adjustments is evident while the effect of the seasonal adjustment is more prominent, particularly in the first quarter of 2019. In the subsequent quarter, the seasonally adjusted export data are very similar to the unadjusted data.

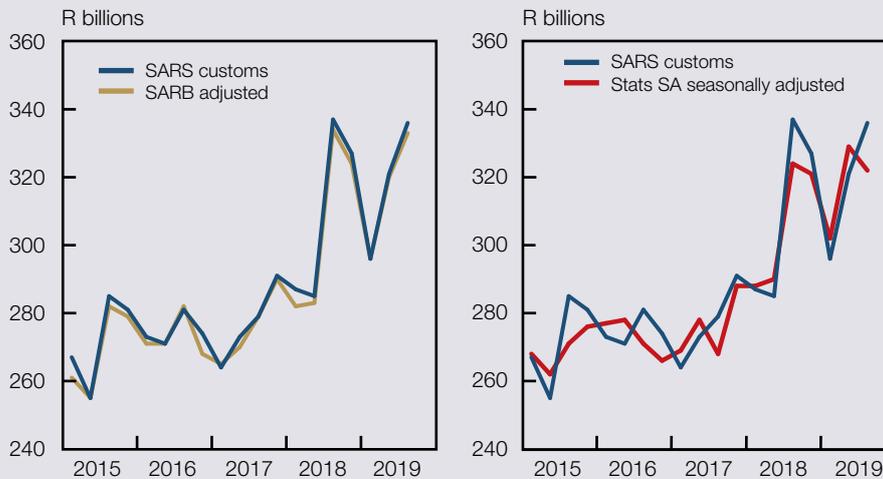
### Value of exports



Sources: SARS, Stats SA and SARB

In the case of imports, the SARB's adjustments generally also have a relatively small impact, while the effect of the seasonal adjustment is more prominent, particularly in the second quarter of 2019.

### Value of imports



Sources: SARS, Stats SA and SARB

The seasonally adjusted trade balance therefore reflects the combined effect of SARB adjustments and Stats SA's seasonal adjustment on both exports and imports, with the seasonal adjustment generally impacting the trade statistics more.