1 The author is indebted to the major South African banks and the Bank's Financial Surveillance Department for providing data. Data processing work by L DeNysschen and M Teu is gratefully acknowledged, as well as graphic presentations by T Mokoetla and T Buys-du Plessis.

# Note on cash holdings and card payments during the 2010 FIFA World Cup™ tournament

by V V Mamba<sup>1</sup>

### Introduction

Economic activities related to the hosting of the 2010 FIFA World Cup™ tournament were spread over a six-year period, culminating in the month-long actual hosting of the event. The tournament month was expected to be a period of exceptionally buoyant business conditions in the retail and tourism sectors. In turn, this was expected to generate a strong increase in the demand for cash by the public, almost reminiscent of the elevated demand for notes and coin generated by the changeover to the year 2000 (Y2K). This note investigates developments in the holdings of banknotes and coin in circulation, and in card payments at the time of the football tournament.

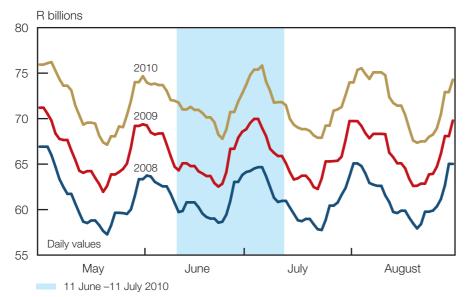
## Trends in notes and coin during the tournament

Work on developing the requisite infrastructure for hosting the football tournament started as early as 2004. This culminated in the timely delivery of stadiums, rail, rapid transit systems, new and upgraded airports, road improvements, and Internet, telecommunications and broadcast systems.

It is difficult to isolate the additional expenditure flows related to the actual hosting of the tournament, although the behaviour of a number of transactions-related indicators may provide helpful insights. The level of notes and coin in circulation may offer an indication of the buoyancy of expenditure flows, and may also be helpful for the monetary sector when other major events are to be hosted in future and logistical planning has to be done to ensure that adequate cash supplies are on hand.

The level of notes and coin circulating outside the South African Reserve Bank (the Bank) follows a distinct monthly cycle. The cycle typically reaches a trough between the twentieth day and the twenty-fourth day of the month, whereafter it rises and peaks between month-end and the fifth day of the following month. With daily data available, how can the *additional* amount of notes and coin in circulation held on account of the tournament be estimated?

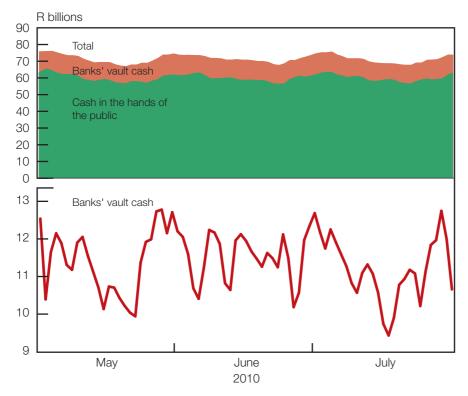
The graph on page 75 shows the daily amount of notes and coin in circulation outside the Bank from the beginning of May to the end of August of each year, for 2008, 2009 and 2010. As nominal income and expenditure increase over time, the curve depicting notes and coin in circulation moves higher from year to year. The shaded area on the graph indicates when the FIFA World Cup<sup>™</sup> tournament was held. The tournament started on 11 June 2010 and ended on 11 July, but business transactions from tourism and logistics for the event may have predated the start date and gone beyond the end date. Nevertheless, comparing the period 11 June to 11 July 2010 with the same period a year earlier, notes and coin in circulation increased by 8,8 per cent on average. By contrast, the average increase from 1 May to 10 June 2010 compared with the corresponding period a year earlier was 8,1 per cent. Similarly, from 12 July to 31 August 2010 the average year-on-year increase was 8,2 per cent. The "additional" notes and coin in circulation during the tournament may therefore be estimated as around 0,7 per cent of the stock of currency, or R0,5 billion.



Notes and coin outside the South African Reserve Bank

During the tournament, notes and coin in circulation outside the Bank recorded a peak of R75,83 billion on 5 July 2010, a few days before the staging of the finals of the tournament. The tournament peak was a paltry R1,87 billion higher than the pretournament peak in early June. It is noteworthy that early in April, with the public and school holidays, the highest holdings of currency in 2010 amounting to R77,59 billion were recorded, with the second-highest being registered in early May at R76,21 billion.

Clearly, the hosting of the 2010 FIFA World Cup<sup>™</sup> had a quite limited impact on currency in circulation. As noted above, the peaks for April and May surpassed the tournament peak.

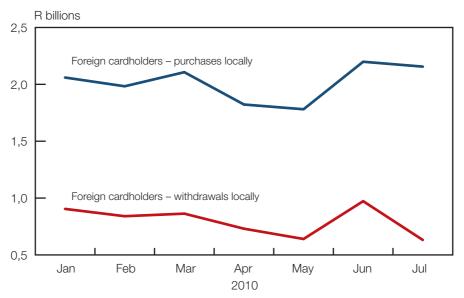


Distribution of cash held in bank vaults and by the public

The daily pattern for cash in the hands of the non-bank public resembles that of notes and coin outside the Bank. Commercial banks' vault cash tends to be more volatile, as seen in the accompanying graph. The summation of bank vault cash and cash held by the public together constitute total notes and coin outside the Bank. The cash holdings of the public displays patterns that confirm those already discussed above for currency outside the Bank.

### The use of credit and debit cards by foreign cardholders

Given the convenience of card purchases and withdrawals and the payments infrastructure in South Africa which readily accommodates the use of such cards, this method of transacting is chosen by many foreign cardholders. The accompanying graph shows the value of purchases and withdrawals in South Africa by foreign cardholders. While such transactions values are usually quite low in the South African winter months, the football tournament drew numerous non-resident cardholders to South Africa, resulting in a significant increase in transactions values in June and July 2010.



Credit and debit card usage by non-residents in South Africa

Source: Financial Surveillance Department, South African Reserve Bank

# Conclusion

From the analysis in this note it is clear that the hosting of the 2010 FIFA World Cup<sup>™</sup> tournament had a quite limited impact on the demand for notes and coin in South Africa. It is crudely estimated that the demand for cash was raised by, on average, 0,7 per cent during the tournament month when compared with the periods immediately before and after. However, as could be expected, card payments by non-residents increased more significantly during the event.