Monetary Policy Credibility and Exchange Rate Pass-Through in South Africa

Abstract
This paper investigates the key factors that explain the documented decline in the exchange rate pass-through in South Africa over the past 15 years, which coincides with the adoption of the inflation-targeting regime. The paper conjectures, in line with the literature, that this outcome is largely due to improved monetary policy credibility. To do this, it first documents the factors that explain monetary policy credibility. Using the standard deviation of individual inflation forecasts as a measure of monetary policy credibility, it shows that the latter is negatively affected by the level of inflation itself, monetary policy uncertainty, and a measure of the unobserved stochastic volatility of inflation. The second phase proceeds by analyzing the determinants of the pass-through using the monetary policy credibility index derived from the first phase. The paper confirms the remarkable achievement that, despite the many shocks that the economy has witnessed, the declining pass-through is indeed explained by the improving monetary policy credibility.
I. INTRODUCTION

Following the finding in Kabundi and Mbelu (2016) that exchange rate pass-through to consumer inflation has declined considerably in South Africa since the adoption of the inflation targeting framework in the early 2000, this paper proposes to examine the role of monetary policy credibility in explaining this outcome. There is growing literature that this may be the case (Gagnon and Ihrig, 2004; Aleem and Lahiani, 2014; Carrière-Swallow, 2016). Understanding this phenomenon is important in assessing the effectiveness of monetary policy in South Africa. Specifically, forecasting of the effects changes in monetary policy on inflation has to incorporate the declining pass-through.

A proper understanding of exchange rate pass-through to inflation in an emerging market country like South Africa is important for policy makers. This is particularly the case since emerging markets and other developing countries are particularly prone to various economic shocks, which can have a material impact on inflation. Since the adoption of the inflation targeting framework in 2000, the central bank has allowed the rand to fluctuate with hardly any interventions. As a result, they cannot directly control the impact of exchange rate fluctuations on inflation outcomes. A good degree of understanding of the degree of pass-through is therefore important since the monetary authorities can only affect the domestic component of price formation.

It is well documented that in South Africa—in line with other emerging markets—that the pass-through has declined over the past fifteen years of so. In an assessment of the pass-through during the period 1994-2014, Kabundi and Mbelu (2016) document the decline by splitting the degree if pass-through in two phases. They show that in the first phase—the impact of exchange rate fluctuations on import prices—the pass-through is nearly complete. However, during the second phase—transmission of import price to consumer prices—the pass-through is incomplete and has declined from about 70 percent in the late nineties to about 20 percent at the end of the period. In an important finding, they also show that there is a degree of asymmetry in the level of pass-through depending on the stage of the business cycle. Both the first- and second stage level and speed of pass-through rise during cyclical upturn of the economy, and decline when the economy is weak.

This paper aims to analyze the key factors that explain the documented decline in the pass-through in South Africa. We conjecture, in line with the literature, e.g., Taylor (2000), that this outcome is largely due to improved monetary policy credibility. Monetary policy credibility is a key ingredient of monetary policy effectiveness, and can be described as the degree to which various economic agents believe that the central bank will act to ensure that it meets its key policy objective(s), especially inflation. Monetary policy credibility is unobservable in practice, and can only be inferred. Dovern, Fritsche and Slacalek (2012) argue that the degree of (dis)agreement among professional forecasters is a good proxy for policy credibility. Monetary policy transparency, predictability, and the perceived degree of central bank independence help coordinate forecasters’ inflation expectations.

1 See for instance, Karoro et al. (2009), Parseley (2010), Aron et al. (2014), and Jooste and Jhaveri (2014).
When monetary policy is credible, there is less uncertainty surrounding both objectives and tools of monetary policy. Keeping inflation broadly within the target range, notwithstanding exogenous or unseen shocks to output, interest rates, and exchange rates obviously increases monetary policy credibility. Another way of measuring monetary policy credibility is therefore the degree to which the central bank meets its own inflation objective, controlling for shocks.

This paper contributes to the literature by conducting a detailed analysis of monetary policy credibility as key explanatory factor in South Africa, something few other authors have done.2 To do this, it proceeds in two phases. First, it documents the factors that explain monetary policy credibility. Using the standard deviation of individual inflation forecasts as a measure of monetary policy credibility, its shows that the latter is negatively affected by the level of inflation itself, monetary policy uncertainty (the degree to which interest rates fluctuate), and a measure of the unobserved stochastic volatility of inflation. The second phase proceeds by analyzing the determinants of the pass-through using the monetary policy credibility index derived from the first phase. The paper confirms that the declining pass-through is indeed explained by the improving monetary policy credibility.

II. RELATED LITERATURE

There is a long-standing conjecture in the literature that declines in exchange rate pass-through observed over the past 15 years in many countries are due in part to improved monetary policy credibility. In a seminal paper Taylor (2000) advanced the conjecture that the decline in pass-through was due to the low inflation environment. For this he proposed a microeconomic model of price setting to show that lower pass-through is caused by lower perceived persistence of cost changes. He provided evidence showing that inflation is positively correlated with its own persistence, suggesting that the low inflation itself has caused the low pass-through. To sum up, he conjectured that stronger monetary policy—characterized by strong nominal anchors and low, stable inflation—leads to an endogenous decline in exchange rate pass-through.

Mankiw and Reis (2002) propose an alternative explanation by way of a sticky information model in which some people form expectations based on outdated information. Economic agents only update their expectations periodically because of costs related to the collecting and processing of information. Mankiw et al. (2003) provided empirical evidence for the sticky information model. They show that in the US the amount of disagreement is surprisingly substantial and that it varies over time in line with other macroeconomic aggregates.

In a comprehensive study covering about 70 countries over the period 1979-2000 Choudhri and Hakura (2006) provide robust evidence for a positive association between pass-through

\[ \text{2 Aron and Muellbauer (2007), based on their analysis of inflation expectations of different agents, conclude that the inflation targeting framework has improved the credibility and the effectiveness of monetary policy in South Africa. Similarly, according to Dincer and Eichengreen (2014), South Africa scores high in terms of transparency, at the same level as Chile, Honk Kong, and South Korea, but above Argentina, Brazil, India, Mexico, and Singapore. It is ranked just below Australia, Israel, and New Zealand.} \]
and the average rate of inflation. The inflation rate seems to dominate over other macroeconomic variables. More recent work has highlighted the importance of monetary policy credibility, especially in the context of the implementation of inflation-targeting framework, as a key explanatory variable for declining pass-through. For instance, Aleem and Lahiani (2014) show a decline in the exchange rate pass-through after the transition to inflation-targeting regimes, but that Latin American countries are characterized by higher pass-through than the East Asian countries. Gagnon and Ihrig (2004) also provide evidence on Taylor’s conjecture, and Dovern et al. (2012) confirm that credible monetary policy contributes to anchoring inflation expectations and interest rate. They argue that for inflation expectations to be well-anchored, their cross-sectional dispersion—disagreement among forecasters—needs to be reduced or disappear.

Similarly, Carrière-Swallow et al. (2016) directly test the hypothesis in a large sample of emerging and advanced economies by looking at first- and second-round effects of currency movements on consumer prices. They find robust evidence in support of the conjecture that improvement of monetary policy frameworks by establishing strong nominal anchors has led to the reduction in pass-through over the past two decades. Price stability and central bank credibility are particularly important in reducing second round pass-through. The paper also confirms the finding in Choudhri and Hakura (2006) that the degree of pass-through depends on the level and variability of inflation.

While confirming that the adoption of IT frameworks reduces the degree of pass-through, Caselli and Roitman document non-linearities and asymmetries in the degree of pass-through. For instance, they find that higher degrees of depreciation lead to much greater and faster levels of pass-through than in the linear case. As a consequence, policymakers should be cognizant that the appropriate policy response should fully incorporate the non-linear nature underlying the dynamic response. In other words, the policy response should be state-contingent in order to better anchor inflation expectations.

III. CHARACTERIZING MONETARY POLICY CREDIBILITY IN SOUTH AFRICA

We proxy monetary policy credibility by a measure of forecast disagreement across forecasters of inflation based on the survey conducted Reuters. This measure represents uncertainty about inflation, which in turn is negatively correlated with the predictability of central banks. Dovern, Fritsche, and Slacalek (2012) find that disagreement about inflation is negatively correlated with the credibility and independence of central banks. It is worth noting that survey data used to construct these measures are subject to the common issue associated with fixed-event forecasts. We face the same challenge with Reuters’ survey data in that the forecasting horizon changes from month to month. To address this issue, we adopt the approach proposed by Dovern, Fritsche, and Slacalek (2012), and construct the proxy for one-year-ahead forecast of inflation by taking a weighted moving average of fixed-event forecasts.

\[
\hat{\pi}_{t,i} = \frac{4-q+1}{4} \pi_{t,i}^{0} + \frac{q-1}{4} \pi_{t,i}^{1}
\]  

(1)
where \( q \in \{1, \ldots, 4\} \) since Reuters’ surveys are expressed in quarterly frequency, \( \pi_{t,i}^q \) is the forecast for inflation for the current calendar year made by the forecaster \( i \) at time \( t \), and \( \pi_{t+1,i}^q \) is forecast for the next calendar year.

We then compute the measure of disagreement, \( \sigma_t^\pi \), as the standard deviation or interquartile range across individual forecasters at each point in time. Two measures are similar, but we prefer the interquartile range as it is insensitive to outliers. Finally, we estimate the index of central bank credibility (\( \delta_t \)) as the inverse of forecast disagreement

\[
\delta_t = \frac{1}{\sigma_t^\pi} \quad (\text{2})
\]

Central bank credibility increases when there is less disagreement among forecasters. In other words, credibility rises when inflation becomes more predictable by agents. A more credible central bank makes inflation easier to forecast. Dovern, Fritsche, and Slacalek (2012) find that central bank credibility is explained by the level of inflation, inflation volatility, and uncertainty about monetary policy. This yields the following expression

\[
\delta_t = \alpha_0 + \alpha_1 \pi_t + \alpha_2 h_t^\pi + \alpha_3 \Delta i_t^2 + \alpha_4 y_t + \epsilon_t \quad (\text{3})
\]

where \( \pi_t \) is the annual headline inflation rate, \( h_t^\pi \) is the permanent shock to inflation, \( \Delta i_t^2 \) the uncertainty about monetary policy represented by the squared change in interest rate, and \( y_t \) the output gap obtained constructed by Anvari et al. (2014). Periods of higher inflation tend to have a negative impact on central bank credibility, whereas low improves it. We therefore expect a negative relation between the central bank credibility and inflation. Credibility of the central bank decreases with a rise in uncertainty about inflation. Finally, uncertainty about monetary policy affects the credibility of the central bank negatively. Hence, we expect all coefficients (except \( \alpha_0 \)) to be negative.

From equation (3), we need to estimate the permanent shock to inflation, \( h_t^\pi \). We follow closely Chan, Koop, and Potter (2013) to estimate permanent shock to inflation based on unobserved components stochastic volatility (UCSV) framework similar to Stock and Watson (2007). The main difference with the latter authors is that Chan, Koop, and Potter (2013) use the bounded random walk model which allows for the trend inflation to vary within a certain bound which consistent with the inflation objective of the central bank. In this case the band is set between 3 and 6 percent (the target range for the SARB).

Mathematically, the inflation gap can be expressed as a first-order autoregressive process of the form

\[
(\pi_t - \tau_t) = \rho_t(\pi_{t-1} - \tau_{t-1}) + \epsilon_t e^{\frac{h_t}{2}} \quad (\text{4})
\]

where

\[
\tau_t = \tau_{t-1} + \epsilon_t^\tau \quad (\text{5})
\]

\[
h_t = h_{t-1} + \epsilon_t^h \quad (\text{6})
\]
\[ \rho_t = \rho_{t-1} + \epsilon_t^\rho \]  

(7)

where \( \epsilon_t \sim N(0,1) \) and \( \epsilon_t^h \sim N(0,\sigma_h^2) \), \( \tau_t \) is the trend inflation, which implies that \( (\pi_t - \tau_t) \) is the inflation gap, \( \rho \) in inflation persistence, and \( h_t \) is the unobserved component stochastic volatility.

Like Chan, Koop, and Potter (2013), we assume the innovation of the bounded trend inflation has the following form

\[ \epsilon_t^\tau \sim TN(a - \tau_{t-1}, b - \tau_{t-1}; \sigma^2_\tau) \]  

(8)

where \( a \) and \( b \) are respectively the lower and the upper bound of the target band. This framework allows the trend inflation to gravitate within the constructed inflation band. Notice that this model is nested in Kabundi, Schaling, and Some (2015) in that the coefficient of the unemployment gap is set to be 0.³

We use the second-stage exchange rate pass-through (ERPT) estimation of Kabundi and Mbelu (2016) based on rolling-window regression as dependent variable of the pass-through model.

\[ \gamma_t = \beta_0 + \beta_1 \delta_t + \omega'Z_t + \xi_t \]  

(9)

where \( Z_t \) is a matrix of control variables. Carrière-Swallow et al. (2016) use the mean of inflation, the standard deviation of inflation, mean of nominal effective exchange rate, standard deviation of nominal effective exchange rate, and standard deviation of short-term forecasts as control variables. However, equation (3) includes the level of inflation and the variance of inflation. This suggests that having these variables again in equation (9) leads to multicollinearity. Hence, our model assumes \( Z_t = 0 \).

The second-stage exchange rate pass-through is obtained from the following expression

\[ cpi_t = \vartheta_t + \varphi_t u_{1c} + \gamma_t ipi_t + \chi_t \]  

(10)

where \( cpi, ulc, \) and \( ipi \) are respectively the consumer price index, the unit labour cost, and imported price index.

### IV. Empirical Strategy and Findings

Following Kabundi and Mbelu (2016), we use quarterly data from South Africa, observed from 1980Q1 to 2015Q2 to obtain the time-varying ERPT based on a 10-year rolling window regression, specified in equation (10). Figure 1 depicts the extracted ERPT which shows a

³ The time-varying Phillips curve of Kabundi, Schaling, and Some (2015) is \( (\pi_t - \tau_t) = \rho_t(\pi_{t-1} - \tau_{t-1}) + \alpha_t(u_t + u_t^\tau) + \epsilon_t \exp \left( \frac{\alpha_t^2}{2} \right) \), where \( u_t \) is the unemployment rate and \( u_t^\tau \) the trend in the unemployment which follows a random walk process, and \( \alpha_t \) is the slope of the Phillips curve. It is clear that this Phillips becomes equation (4) if \( \alpha_t = 0 \).
considerable decline from 50 percent in 1998 to 20 percent in 2002. Ever since the EPRT has been roughly stable between 20 percent and 30 percent. These authors attributed the decline in the ERPT to change in monetary policy, namely the adoption of inflation rate targeting (IT) as monetary policy.

We construct the measure of forecast disagreement from Reuters’ survey on inflation, which is only available from 2002Q2. Reuters conducts survey each month on professional forecasters about the state of the economy. Number of respondents was about 13 at the beginning of the sample, and reached a maximum of 25 respondents in September 2014. The starting point of the sample restricts the analysis to the post-IT period. However, for the pre-IT period we use measure of monetary policy credibility based on forecasting disagreement constructed by Redl (2015).4

Figure 1: Time-Varying Exchange Rate Pass-Through

A. Determinants of Monetary Policy Credibility

Figure 2 represents the two measures of forecast disagreements based on stand deviation and interquartile range of forecasts across agents, and inflation. The figure highlights strong correlation between the two measures of disagreement with coefficient of correlation of 0.90. Nevertheless, the disagreement based on interquartile range appears more volatile than the

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4We thank the author for allowing us to use his series. The two series comove, with the correlation coefficient of 0.49.
standard deviation. Note a striking co-movement between forecasts disagreement and the level of inflation. As suggested by Dovern, Fritsche, and Slacalek (2012), periods of high inflation, like from 2002Q3 to 2003Q3 and from 2007Q4 to 2009Q1, are consistent with high disagreement among the professional forecasters. It is worth mentioning that inflation breaches the target band during these periods. Conversely, periods of relatively low and stable inflation coincide with low disagreements, except in 2015Q1 and 2016Q1.

**Figure 2: Forecast Disagreements and Inflation**

Figure 3 shows a close relationship between our measures forecast disagreement and inflation volatility obtained from equations 5 to 8, as presented by Dovern, Fritsche, and Slacalek (2012). Interestingly, the estimated inflation volatility is the same as in Kabundi, Schaling, and Some (2015). There is a clear positive relationship between these series. Uncertainty in inflation is consistent disagreement in forecasting between professional forecasters, which is also in line with period of high inflation. Ball (1992) provides theoretical basis of empirical evidence of the link between the level of inflation and inflation uncertainty found by Ball and Cecchetti (1990), Cukierman and Meltzer (1986), and Devreux (1989). He argues that rise in inflation raises uncertainty about future inflation because high inflation puts policymakers in a dilemma of either to accommodate the real economy and keep inflation high or to disinflate and face recession. Hence, agents are unsure about the preference of policymakers, which in turn generates disagreement in their forecasts. Even
though inflation volatility is trending upward since 2014, the two spikes towards the end are outliers.

**Figure 3: Forecast Disagreements and Inflation Volatility**

Istrefi and Piloiu (2014) show how monetary policy uncertainty affects both short- and long-term inflation expectations. Short-term inflation declines following a rise in monetary policy uncertainty, whereas long-term expectations tend to increase. These findings are consistent with the gradualist approach of monetary policy. Since macroeconomic variables are released with delay, policymakers do not have all information concerning the state of the economy when they make decisions. Hence, it is preferable to act less aggressively rather than following the so-called “cold turkey” approach. In so doing, the policy rate is smooth and less volatile. The opposite approach might result in severe effects in the real economy than intended.

Figure 4 reveals periods of monetary policy uncertainty are also linked with instances of forecast disagreements. The two spikes observed in 2003-2004 and 2009 represent, respectively, the aggressive monetary policy followed by the SARB to curb inflation and deal with risk of recession caused by the GFC. From March to September 2002, the SARB hiked its policy rate (repo rate) by 300 basis points, and then reversed it by a 500 basis point cut from June to October 2003. Similarly, it decreased the repo rate by 500 basis points from December 2008 to August 2009. Besides these two outliers, the uncertainty about monetary policy has been low, which suggests that in general monetary policy has been smooth.

**Figure 4: Forecast Disagreements and Squared Change in the Repo Rate**
Figure 5 illustrates the countercyclicality of disagreement about inflation. The negative output gap in the beginning of the sample is match with a rise in disagreement across agents. Disagreement about inflation is low and stable when the economy experienced unpresented economic boom, represented here by a substantial rise in the output gap from 2003 to 2008. The GFC which resulted in decline in global trade put a downward pressure on the South African economy, leading a sharp drop in the output gap, while at the same time the disagreement attained at its peak. Similarly the two spikes in disagreement in 2015 and 2016 coincide with the deceleration of the South African economy.
We use the standard deviation measure of credibility, just because it is less volatile than the interquartile range measure. But the results are qualitatively the same with either measure. In addition, we use one year moving average of the credibility in the analysis given that the original series is stationary. Table 1 presents the estimation of equation (3). To avoid the risk of multicollinearity caused by a relatively strong correlation between inflation and inflation volatility, we run two separate Fully Modified OLS (FMOLS) cointegrating regressions of Phillips and Hansen (1990). In line with Figures 2 to 5, all the results show expected sign of coefficients and they are statistically significant. Finally, all three regressions depict a higher explanatory power of monetary policy credibility with an adjusted R-squared of 60 percent for the two first regressions, and 80 percent for the last.

Three important policy implications can be derived from these results. First, inflation volatility affects negatively monetary policy credibility in South Africa. These results are consistent with Kabundi, Schaling, and Some (2015) who find evidence of a decreasing inflation volatility that is consistent with a decline in inflation persistent. Second, uncertainty in monetary policy renders the predictability of inflation by agents difficult, which in turn impact negatively anchoring of inflation expectations. Furthermore, a high inflation environment is detrimental to the credibility of monetary policy. Finally, credibility tends to increase in favourable economic situation, but it deteriorates in recession.
Table 1: Determinants of Monetary Policy Credibility

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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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<tbody>
<tr>
<td>Permanent inflation shock (h²)</td>
<td>-7.493***</td>
<td>11.830***</td>
<td></td>
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<tr>
<td></td>
<td>(0.967)</td>
<td>(1.166)</td>
<td></td>
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<tr>
<td>Annual inflation (π)</td>
<td>-0.863***</td>
<td>-0.975*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.367)</td>
<td>(0.522)</td>
<td></td>
</tr>
<tr>
<td>Monetary policy uncertainty (Δi²)</td>
<td>-0.897***</td>
<td>-0.975*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.321)</td>
<td>(0.522)</td>
<td></td>
</tr>
<tr>
<td>Output gap (y)</td>
<td>1.460***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.669)</td>
<td></td>
<td></td>
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<tr>
<td>α₀</td>
<td>13.627***</td>
<td>15.010***</td>
<td>10.563***</td>
</tr>
<tr>
<td></td>
<td>(0.592)</td>
<td>(2.420)</td>
<td>(0.669)</td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.596</td>
<td>0.599</td>
<td>0.803</td>
</tr>
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Note: ***p < 0.01, **p < 0.05, *p < 0.1. Standard errors are in parentheses.

B. Monetary Policy Credibility and Exchange Rate Pass-Through

Figure 6 depicts our measure of credibility and the exchange rate pass-through (ERPT) observed from 2003Q2 to 2015Q1. It is evident from the figure that the two series are negatively correlated, in line with the findings of Carrière-Swallow et al. (2016). The relatively high pass-through (PT) observed in the beginning of our sample coincides with instances of low credibility. It is followed by downward trend in the ERPT while at the same time credibility improves, reaching the peak in 2006 before starting its decline in 2007Q2, just before the global financial crisis. Notice that this decline is mirrored by an upward trend in the ERPT which attains its maximum of 27 percent in 2009Q3, whereas the monetary policy credibility reaches the trough two quarters earlier. Again, the two series portray a negative relationship from 2009 to 2012, where credibility increases sharply, then remains high and stable until the end of the sample. It is worth mentioning that the period of high and stable monetary policy credibility coincides with period of stable inflation and inflation expectations, albeit at the upper hand of the official target range. Similarly, the ERPT stays relatively constant from 2012 onward.

However, the limitation of this analysis is that it is silent regarding the change in monetary policy. We expect the inflation-targeting regime, which was adopted by the SARB in 2000, to improve the credibility of monetary policy and at the same time reduce the ERPT, as suggested by Kabundi and Mbelu (2016). To address this issue, we use the cumulative credibility measure of Redl (2015), which is available since 1997. The pattern followed by the two series in Figure 6 is somewhat the same as that in Figure 5, expect for a sharp increase in 2013. Interestingly, we observe a positive correlation between the two series from 1997 to 2000. They first increase until 1998Q3, then decline together, the credibility reached
the bottom in 2000 while the ERPT is still decreasing. The negative relationship becomes only evident from 2001.

**Figure 6: Cumulative Credibility and Exchange Rate Pass-Through**

**Figure 7: Cumulative Credibility of Redl and Exchange Rate Pass-Through**
The observation from figures 6 and 7 is even clearer from results obtained in Table 2. Table 2 is the estimation equation (9). Regression (1) is based on our measure of credibility. Because of restriction associated with data availability, the estimation includes only data from 2003Q2 to 2015Q1. But we use Redl’s credibility measure in regressions (2) and (3). The difference between the two last estimations is that (2) uses the entire sample, that is, from 1997 to 2014, whereas (3) is based on a short sample to account from change in the nature of relationship as discussed above. Hence, estimation (3) uses data from 2001 to 2014. The results confirm the graphical observation of negative relationship between the two variables in (1). Notice that the coefficient is statistically significant at 1 percent level, and the explanatory power is quite high, with the R-squared of 58 percent. However, using the sample from 1997, credibility does not explain movement in the ERPT. But, recall that there is a positive relationship at the beginning of the sample, which is somewhat misleading. Regression (3) confirms the notion of changing relationship between monetary policy credibility and the ERPT.

<table>
<thead>
<tr>
<th>Table 2: Credibility and Exchange Rate Pass-Through</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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<tbody>
<tr>
<td>Monetary policy credibility index</td>
<td>-</td>
<td>0.005***</td>
<td>-0.002**</td>
</tr>
<tr>
<td>(δ)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>β0</td>
<td>0.233***</td>
<td>0.350***</td>
<td>0.180***</td>
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<tr>
<td></td>
<td>(0.015)</td>
<td>(0.048)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>N</td>
<td>47</td>
<td>71</td>
<td>47</td>
</tr>
<tr>
<td>R²</td>
<td>0.584</td>
<td>0.500</td>
<td>0.463</td>
</tr>
</tbody>
</table>

Note: ***p < 0.01 and **p < 0.05. Standard errors are in parentheses.

V. CONCLUDING REMARKS

This paper has documented in detail the degree to which improving monetary policy credibility has helped reduce the exchange rate pass-through to inflation in South Africa. This is quite a remarkable achievement given the numerous shocks—including large food and fuel price shocks, the global financial crisis, sharp fluctuations in the rand, etc.—that the economy has gone through over the past 15 years or so. This finding is important because monetary policy authorities do not have to worry to a great degree about exchange rate fluctuations—over which they have made a policy choice not to influence—when deciding on monetary policy actions.

The authorities can therefore mainly focus domestic factors over which they have greater control. The paper provides insights on what factors can increase monetary policy credibility. Greater transparency, better communication, and lower volatility in interest rates are clearly important policy levers to increase credibility.

One important issue that the paper does not deal with is the current policy debate in South Africa over lowering inflation expectations, which seem to be permanently stuck at the high
end of the target range of 3-6 percent. Hitting the middle or lower end of the target has obvious advantages in improving external competitiveness since most of the country’s main trading partners have traditionally had lower inflation than South Africa. That said, it is uncertain whether improving monetary policy credibility alone would lower inflation expectations, or there is something more structural in nature. Some observers, like Klein (2011) and Fedderke et al. (2007), have conjectured that this may be related to the role played by market concentration in price formation, both among producers and trade unions. This is a worthy topic to investigate further.
References


