evidence for a monopoly in the banking market. The results suggest that, for the observed period, the Sri Lankan banking sector is characterized by monopolistic competition for traditional banking activities according to the PR classification. This indicates that an increase in input prices will lead to a less than proportional increase in interest revenues, as the demand for banking faced by individual bank is inelastic. As this value is in the range between 0.5 and 1, the estimated *H* statistic supports evidence for a moderately competitive market for interest revenue in the Sri Lankan banking industry. This result is quite similar to the *H* statistic estimated by Bikker et al (2006a). They use the P-R model to provide *H* values for 101 countries over 1996-2004, based on 25,000 banks. In their study, the estimated *H* statistic for Sri Lanka was reported as 0.69 for the period 1994-2001. The estimated H statistics of the present study was 0.68 for this particular period (1996-2004).

Table 1- Regression results for H statistics

$$\log TR_{it} = \alpha + \beta_1 \log IPL_{it} + \beta_2 \log IPF_{it} + \beta_3 \log IPC_{it} + \lambda \log TA_{it}$$

$$\text{Log } TR_{it} = -0.342 + 0.23 \log IPL_{it} + 0.31 \log IPF_{it} + 0.007 \log IPC_{it} + 0.02 \log TA_{it}$$

(-5.56)*** (10.76)*** (20.09)*** (1.78)** (2.19)***

with adjusted $R^2 = 0.72$ F-statistics = 202.63***

Durbin-Watson stat for serial correlation = 1.97

In addition to panel regression above, time series estimates of the *H* statistic from 1996 to 2010 were generated by EGLS regressions of equation 1 to assess the change of *H* statistic over the sample period. In OLS procedure the study used White diagonal standard errors and covariance to address any heteroskedasticity across the sample banks. As in many other studies, the current dataset is not large enough to attain robust annual estimates for the seven parameters in the model. Accordingly, the sample period is divided in five lustrums: 1996-1998, 1999-2001, 2002-2004, 2005-2007, and 2008-2010.

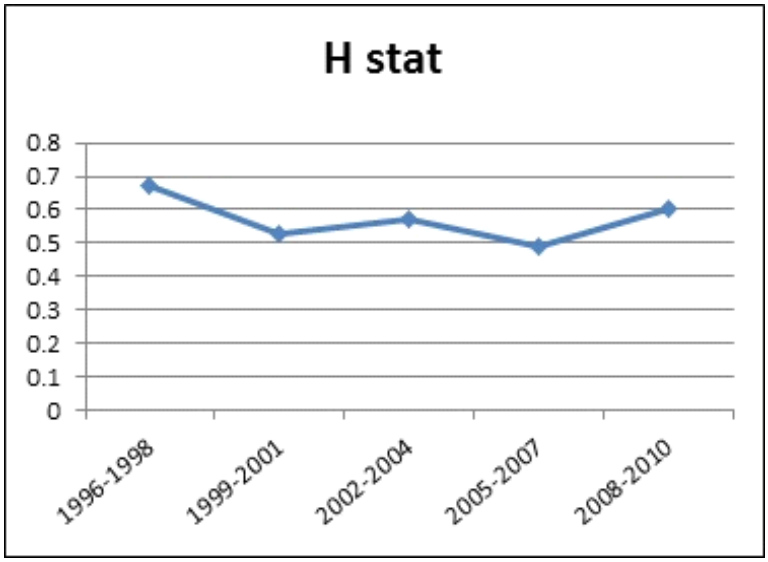

Figure 2
Trends in observed competition measure of Sri Lankan commercial banking sector 1996-2010
Source: Calculations by the author

The first stage exhibits the highest level (0.67), but declines during the second stage (0.53) and rises to an intermediate position during the third phase (0.57). The H statistic reaches its minimum in the fourth stage, significantly, the H-statistic rises to an intermediate position (0.6) during the last stage.

The most important issue to address in the present paper is whether any difference exists between the competition among domestic banks and that of foreign banks. More interestingly, the H statistics estimated for two sub sets depicts a counteraction in competitive behaviour. In each stage of analysis when the degree of competition is higher in domestic banks, lower the level of competition is evident in foreign banks and vice versa. This particular behaviour is true for the whole period except for the period 1996-1998. This can be clearly demonstrated with the figure 3.

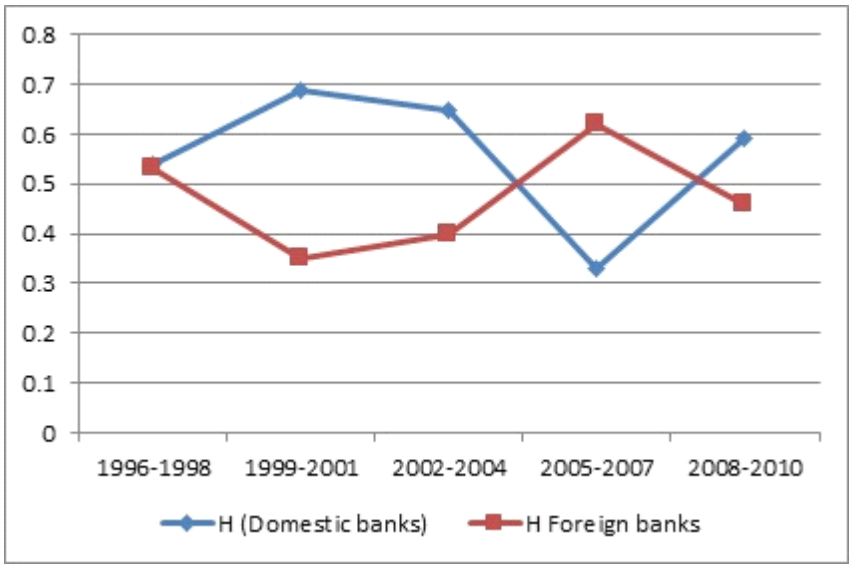

Figure 3
H Statistics: Domestic banks Vs Foreign banks, 1996-2010
Source: Calculations by the author

This particular behavior then was statistically tested in order to prove any significance in this relationship. For that the degree of domestic bank competition was regressed with the degree of foreign bank competition by estimating Equation 2.

An analysis of the sign and significance of the regression coefficient (Equation 2) indicates that the magnitude of foreign bank competition is negative and statistically significant at 1% level for the observed period. The results indicate that, for the period 1996–2010, competitiveness of foreign banks has negatively affected on the competitiveness of domestic banking sector in Sri Lanka.

Table 2 – Regression results -Effect of foreign bank competition on domestic bank competition

Dependent Variable: Com_Dom

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Com_For	-1.273087	0.200561	-6.347631	0.0079
C	1.160897	0.096578	12.02031	0.0012

R-squared	0.930704
Adjusted R-squared	0.907605
S.E. of regression	0.042772
Durbin-Watson stat	2.111635
F-statistic	40.29242
Prob(F-statistic)	0.007909

Note: Com_For is foreign bank competition

This counter competitive behaviour in Sri Lanka may be particularly true as the competition arisen from domestic banks was quite high in late 1990s. As the resource needs and customer bases of foreign and domestic banks become more and more similar, their market niches overlap more and more, and the competition between them becomes more and more intense. As a result, the competition from foreign banks might be discouraged with the gradually intensified competition of domestic banks at this initial stage, where the domestic private banks were establishing and capturing the local market. Specially the domestic banks commenced their operations with improved technology, innovative products and enhanced customer service after late 1990s. The competition of foreign banks underweighs that of domestic banks, when the competition effort of domestic banks tries to familiarize the banking system to the customers. The reason for this according to Zaheer and Mosakowski (1997) is the liability of foreignness that initially leaves them intrinsically weaker than their domestic competitors. However after year 2002 foreign banks too stepped to a competitive edge with more localized banking service. This is quite evident with the strategic behaviour of the two largest foreign banks operated in the country HSBC and Standard Chartered Bank.

7. CONCLUSION

The aim of the study was to enhance the rather scarce empirical evidence on the effect of foreign banks competition on competitiveness of Sri Lankan domestic banking sector. Findings of the study revealed that competitive behavior of the foreign banking sector in Sri Lanka is low compared to domestic banking sector. The study found a negative effect of foreign bank competition on domestic bank competition. While the entry of foreign banks is generally thought to have favorable effects on the development of host banking systems, including through increased competition, the findings of the present study question the true effect of foreign bank operation in Sri Lanka. While the potential benefits of foreign bank entry are many, this kind of evidence reveals that information asymmetries perhaps prevent many firms in developing economies from realizing these benefits. The reason for this may be the liability of foreignness that initially leaves them intrinsically weaker than their domestic competitors. However if all the foreign banks can put an equal competitive pressure without just being “cherry pick” borrowers, the favorable effects on the competition in the Sri Lankan banking sector can be expected.

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