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Linking Money And Prices In Nepal: The P-Star Model Approach

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INTRODUCTION

In the 1980s, the majority of the Asian countries have exerienced substantial structural changes and rapid growth in the financial system. There is evidence that financial innovations and deregulations have become frequent isssues in the Asian financial markets. Among the major invnovations were the liberalisation of interest rates, relaxation of exchangee controls, foreign exchange dealings by financial institutions, computerised cheque clearing system, electronic banking, new financial instruments, as for example, negotiable certificate of deposits, bankers acceptance and repurchase agreement arrangement etc.

More important, these structural changes and financial innovations in the financial system have significant implications for public portfolio behaviour and consequently, for the conduct of monetary policy. According to Laumas and Poeter-Hudak (1986), the success of monetary policy depends on the extent to which the demand for money function can be estimated, and on the stability of the money demand function. Judd and Scadding (1982) further pointed out that the stability of the money demand function depends on the financial and monetary developments which include financial innovations in the financial markets. These innovations will alter public behaviour in the holding of real money balances. With financial and monetary development, the role of the non-bank financial intermediaries become apparent, offering a spectrum of interest-bearing financial instruments of various maturity dates. A shift out of money, currency and demand deposits, to these interest-bearing financial assets will subsequently affect the stability of money demand fuction.

Not suprisingly, the aftermath of recent finanical liberalisation has created new problems for the monetary authorities of the developing countries. The relationship between monetary aggregates, in particular, the

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narrow money M1, and income and prices has been questioned more recently. There is evidence that there has been a breakdown in the link between M1 and several key marcroeconomic variable in the developing countries. This has led the monetary authorities to focus on broader monetary aggregates as monetary indicators for policy action (Tseng and Corker 1991; Adhikary 1989). Earlier, Gurley and Shaw (1960) contended that the increased availity of interest-bearing financial assets as a result of an expanding financial sector, can raise the sensitivity of money holdings to changes in interest rates. The implications of the growth of these money substiitutes are important to monetary policy since with a high interest elasticity of money demand, monetary policy becomes less effective.

The purpose of this paper is twofold. First, to investigate the relationship between money and price level in Nepal using the P-Star approach recently proposed by Hallman et al. (1989). Despite financial deregulation and innovations in the United States in the 1980s, using the P-Star model, Hallman et. al. (1989) found out that 'P* ties together the level of money and prices' very well, and the model was able to track inflation movements successfully. Secondly, to propose, construct and investigate the performance of *Divisia* monetary aggregate as alternative to the conventional *Simple-sum* aggregate as intermediate indicators in this country. Recent development in monetary economics suggests that the *Divisia* aggregate is the appropriate measure of money as it measure the monetary services for holding money, and empirical studies in the developed countries has indicated that *Divisia* money is superior than its counterpart, the conventional *Simple-sum* aggrerate.

This paper tries to present the derivation of the P-Star model first and discusses the computation of p* following with discussion on the construction of *Divisia* aggregate and sources of data used in the analysis. Lastly, it presents empirical results containing with the main conclusions.

The HPS-P-Star (P*) Model

If money is to have a useful role in the Central Bank's policy process, there must be a stable relationship between the monetary aggregate and the general price level. If money is a good predictor of inflation, the Central Bank will be able to determine the level of monetary growth that is consistent with sustainable, non-inflationary economic growth. In a standard reduced- form model, the determinants of inflation range from money supply, wages, productivity, import prices, exchange rates etc. Modelling inflation becomes more complicated when expectations is incorporated in the model and long lags of each independent variables were allowed (Hagger 1977, Frisch 1976). However, more recently Hallman et al. (1989) have proposed a more simplistic modelling of inflation. In Hallman et al. model, hereafter the HPS model, the discrepancy between actual price level and the equilibrium price level is the key determinant of inflation. The equilibrium price level or the so-called P-Star (P^*) is determined by the level of money stock, the equilibrium velocity (V^*) and the potential output (Q^*). Using quarterly data covering the period 1870 to 1988 for the United States, Hallman et al. (1991, p. 857) conclude that, "P^* through its dependence on long-run values of velocity and output can be used to indicate long-term price developments."

The P^* approach is based on the equation of exchange. According to the equation of exchange

$$PQ = MV \qquad (1)$$

where the product of the price level (P) and real GNP (Q) equals the stock money (M), multiplied by its velocity (V). Taking logarithms (lower-case notation) for equation (1) gives

$$p + q = m + v \qquad (2)$$

From equation (2), the price level can be express as

$$p = m + v - q \qquad (3)$$

According to Hallman et al. (1991), the equilibrium price level (P^*) is written as follows

$$p^* = m + v^* - q^* \qquad (4)$$

where v^* is the equilibrium level of velocity and q^* is the real potential output. Equation (4) says that the equilibrium price level, P^*, is defined as money stock per unit of real potential output and the long-run equilibrium level of the velocity of money. Substracting equations (4) from (3) we have the following HPS-P-Star model derived by Hallman et al. (1989, 1991),

$$p - p^* = (v - v^*) + (q^* - q) \qquad (5)$$

According to equation (5), the gap between the actual and equilibrium prices, $p - p^*$, is determined by a velocity gap, $v - v^*$, and an output gap, $-q$.

q^* The P-Star model indicates inflationary pressure if there is a monetary overhang, that is when current velocity is below its long-run equilibrium level or raise current output above its potential level or both.

Hallman et al. (1991) hypothesise that in the long-run, the discrepancy between actual and equilibrium prices, P - P*, becomes zero as p adjust to P*. Assuming the long-run relationship between p and p*, the short-run dynamic model of inflation is therefore, given by the following model

$$\Delta p_t = \alpha(p_{t-1} - p^*_{t-1}) + \sum_{i=1}^{k} \beta_i \Delta p_{t-i} + \varepsilon_t \qquad (6)$$

where α is the speed of adjustment of actual prices to p* and shuld be negative. However, in their paper, Hallman et al. (1991) estimate the following short-run inflation equation, which has been derived by substracting π_{t-1} from both sides of equation (6).

$$\Delta \pi_t = \alpha(p_{t-1} - p^*_{t-1}) + \sum_{i=1}^{k} \beta_i \Delta \pi_{t-i} + \phi_0 \pi_{t-1} + \varepsilon_t \qquad (7)$$

where π is the rate of inflation, equal to $p_t - p_{t-1}$. Kool and Tatom (1994) pointed out that equation (7) is generally a more useful equation to estimate. The parameter ϕ in equation (7) can be used to check whether the dependent variable should be the change in inflation, as in equation (7) or simply the rate of inflation, as in equation (6), itself. If inflation is nonstationary, and its first difference is stationary, then ϕ in equation (7) should be zero and thus lagged inflation can be omitted. Equation (7) would therefore, contain only stationary variables since πt-1 can be comitted.

Hallman et al. (1991) also proposed estimating an alternative inflation model based on its components. Substituting equations (5) into (7) we have the unrestricted inflation model of the following form

$$\Delta \pi_t = \gamma_1(v_{t-1} - v^*_{t-1}) + \gamma_2(q^*_{t-1} - q_{t-1}) + \sum_{i=1}^{k} \beta_i \Delta \pi_{t-i} + \phi_0 \pi_{t-1} + \varepsilon_t \qquad (8)$$

Hallman et al. (1991) constraint the velocity gap, $v_{t-1} - v^*_{t-1}$, and the output gap, $q^*_{t-1} - q_{t-1}$, in equation (8) with equal weights, that is $\gamma_1 = \gamma_2$. Equation (8) presents two competing view of how the rate of inflation adjusts from a disequilibrium position. The Phillips curve view or the output gap model of inflation is the special case of equation (8) in which $\gamma_1 = 0$. In this case, inflation rate adjusts to the output gap. On the other hand, the monetarist model of inflation is when $\gamma_2 = 0$, in which the inflation rate adjusts to monetary equilibrium.

SOURCES AND DESCRIPTION OF DATA USED

A central issue in empirical testing of the HPS-P-Star modelling approach is how to measure potential output (q*) and equilibrium velocity (v*) since these two series are unobservable. In this study we used the Hodrick-Prescott (HP 198) filter to determaind potential output and equilibrim velocity. The HP-filter is a common procedure to estimate trends, particularly in the business cycle literature. In implementing the P-Star approach, in their study, Hoeller and Poret (1991) and Kool and Tatom (1994) have applied the HP-filter to compute the potential output and equilibrium velocity. Hoeller and Poret (1991) and Razzak and Dennis (1996) have pointed out that the HP-filter is easy to implement, compared to more complicated Kalman filter, and the trends it produces usually appear plausible.

According to Hodrick and Prescott (1980), and Kydland and Prescott (1990), the filter is designed to produce a non-linear trend based on the variability of the series by minimising the following problem

$$\sum_{t=1}^{T} (y_t - \tau_t)^2 + \lambda \sum_{t=2}^{T-1} [(\tau_{t+1} - \tau_t) - (\tau_t - \tau_{t-1})]^2 \quad (9)$$

where y is the time series, τ is the trend component series (τ_t, t = 1,...,T) and λ is a fixed parameter. The first term is the sum of the squared deviations between the contemporaneous trend values and the original series. The second term is multiple λ of the sum of the squares of the trend component's second differences. Hodrick and Prescott (1980) claimed that λ can be interpreted as a measure of the relative differences of the trend component. If $\lambda = 0$, the growth component series coincides with the original series and the cyclical component is zero. If λ goes to infinity, the trend component approaches a linear deterministic time trend. Hodrick and Prescott (1980) proposed a value of $\lambda = 1600$ for quarterly time series data as reasonable, and their recommendation has been widely followed in the literature applying the HP-filter, thought the HP-filter has been criticised on several grounds, which among others are (a) the computation of the trend component is sensitive to the choice of λ, (b) the filter can alter the properties of the series, (c) the filter can lead to spurious cyclical behaviour and (d) the filter can generate business cycle dynamics even if none are present in the original series (King and Rebelo 1993, Jaeger 1994 and Cogley and Nason 1995.) Given these strictures, we emphasise that our use of the filter is purely for exploratory purposes.

In this study, we used quarterly time series data for the period 1981:1 to 1994:4. For the purpose of this study, we used consumer price index as measure of price level for Nepal. Since there is no a priori evidence which measure of money to be used - narrow or broad money, we employed both monetary aggregates Ml and M2 for the construction of P-Star. Empirical studies have shown that different monetary aggregates used to construct P-Star, have different implications on the performance of the P-Star approach. For example, in the United States, Hallman et al. (1991) have indicated that M2 can be a good anchor for the prince level, but Tatom (1990) on the other hand, suggests that money and price level are linked when M1 is used to construct P-Star. For France, Bordes et al. (1993) found that, between monetary aggregates M1, M2 and M3 which was used to calculate P-Star, a long-run relationship between money and the price level was established using M1 and M2. On the contrary, Todter and Reimers (1994), found that between the three monetary aggregates (M1, M2 and M3), 'the best result was obtained when M3 is used to estimate the equilibrium price'. In this study, as an alternative to the above conventional *Simple-sum* M1 and M2, I have introduced weighted monetary aggregates, particulary *Divisia* M1 and M2 for Nepal. Barnett (1980) stresses that *Divisia* monetary aggregates is an appropriate measure of monetary services, while Barnett and Spindt (1982) have provided a *Divisia Cookbook* index for the computation of a *Divisia* aggregate. The reason for considering *Divisia* aggregate is that the traditional *Simple-sum* monetary aggregate is not a good measure of monetary services of a country. Accourding to Barnett (1980), the assumption made in constructing the *Simple-sum* aggregate which is based on their components receive equal weights of one are contrary to the voluminous studies existing in the literature which indicate that each monetary asset has a certain degree of moneyness associated with it. Therefore, according to the proponents of the *Divisia* approach, it is not which assets are to be included in the measure of money stock which is important, but rather how much of each monetary asset is to be included. This points to the conclusion that each componet should be given a different weight when adding the various components of financial assets to arrive at the official monetary aggregates.

Following Barnett (1980), a *Divisia* monetary aggregate is constructed in the following manner: Let q_{it} and p_{it} represent the quantities and user costs of each asset to be included in the aggregate at time t. The expenditure share on the services of monetary asset i in period t is

$$S_{it} = p_{it}q_{it}/\Sigma_j p_{jt}q_{jt}. \quad (10)$$

The user cost (Barnett 1978) of each asset is measured as

$$p_{it} = (R_t - r_{ij})/(1 + R_t) \quad (11)$$

where R_t is the benchmark rate, the maximum [r_j, r_i; i=1,2,...,n). j=1,2,...k. i≠j]. The growth rate of a *Divisia* aggregate then can be written as

$$G(Q_t) = \sum_{i=1}^{n} s_{it}^{*} G(q_{it}) \quad (12)$$

where $S_{it}^{*} = 0.5\ (S_{it} + S_{it-1})$ and n is the number of assets in the aggregate. Single period changes, beginning with a base period can be cumulated to determine the level of the *Divisia* aggregate in each succeeding period.

Details of the monetary components and their respective user costs in constructing the *Divisia* monetary aggregates are presented in Table 1. From Table 1, we can observe that the rate of return on currency is assumed to be zero since it is a perfectly liquid asset. On the other hand, although the explicit rate of return on demand deposits is also zero, Offenbacher (1980) and Barnett et al. (1981) strongly argue that an implicit rate of return must be imputed to demand deposits, if the substitutability between currency and demand deposits is to estimable. Barnett (1982 P. 699) proposes that, "In some cases implicit rates of return must be used in computing the interst rates in the formula p_i, especially when the own rate of return on an asset is subject to governmental rate regulation. An implicit imutation is also used in the measurement of R. The *Divisia* quantity index has been found to be robust to those imputations within the plausible ranges of error in the imputation".

Table 1
Information Used To Construct Divisia Aggregates

Money	Asset Components	Rate of Return
M1	Currency in Circulation	Zero
	Demand Deposits	Implicit rate of return. Using Klein's (1974) method. The basic formula for computing Demand deposit rate of return (DDr) is as follows: DDr = r_L*(1-RRDD), where r_L is commercial bank's lending rate on Industry loans (percent p.a.), and PRDD is reserve requirement on demand deposits.
M2	Saving Deposits	Saving deposit rate
	Fixed Deposits	(SDr) in percent p.a
		Fixed deposit rate (FDr). FDr = max [(r_i)], where i = 3, 6, 12, 24 months maturity (percent p.a).
	Margin Deposits	Margin deposit rate (MDr). Proxied with-Mdr = Exort bill rate less saving deposit rate.
	Benchamark Asset	Maximum available rate. Max = {[DDr, SDr, FDr, MDr, r_i] +0.1}, where i = Treasury bills, National savings certificate, Development Bonds and Nepal Rastra Bank Bonds.

Source: Compiled and Constructed by the Author

However, the proper implict rate imputation to demand deposits remains an open issue. Following Offenbacher (1980), the approach taken in this study is to compute an implicit rate using Klein's (1974) methodology. The formula used for constructing the implicit rate on demand deposits (DDr) is given as follows

$$DDr = r_L[1- (BR/DD)] \quad (13)$$

where r_L is the rate of return on bank's earning assets and BR (13) is bank reserves on demand deposits. As for the benchmark asset, as shown in Table 1, we follow the envelope approach, that is, a series of benchmark rate is formed by selecting that benchmark rate which is higher than the rate of return of each monetary asset componets. This will ensure that $p_i \geq 0$. Furthermore, Binner (1990) proposes adding 0.10 points to the benchmark rate to ensure that this rate will be non-zero.

For output, we used total export as proxy for nominal income since gross national product for majority of the Asian countries are only available in annual form. The rationale of using exports as proxy for income in the Asian developing countries have been supported by numerous empirical studies, for example by Tyler (1981), Feder (1983), Kavoussi (1984), Ram (1987), Moschos (1989) and Odedokun (1991). These studies have empirically detected positive and significant effects of export expansion on economic growth. Furthermore, the use of export will minimise any spurious results that will arise when using income that had been generated using some interpolation technique. Nevertheless, one has to be cautious when interpreting the results. Data on consumer price index, total exports, and monetary aggregates and their components have been compiled from various issues of *SEACEN Financial Statistics-Money* and Banking published by the SEACEN Centre, and International Financial Statistics which is published by the International Monetary Fund.

EMPIRICAL RESULTS

Table 2 reports the results from estimating equation (7) and Table 3 from estimating equation (8). The number of lagged dependent variables varies between the two countries and between different types of monetary aggregates used to attain white noise. The results show that for *Simple-sum* M2, lagged dependent variable of five period is required to achieve white noise. However, in other regression equations estimated shorter period of lagged dependent variable is required to whiten the disturbance term. In all equations estimated I have excluded constant term and lagged one period inflation rate (π_{t-1}) since both were not significantly different from zero. Similar result was also obtained by Hallman et al. (1991). The results in

Table 2 suggest that the inflation equation can be explained satisfactorily using the price gap and lagged inflation in first-differenced, as the determinants for Nepal. The price gap has a correctly negative sign and was significantly different from zero for all four monetary aggregates used in computing P*. The speed of adjustment for Nepal suggests that actual inflation adjust to p* takes place quite rapidly: about 40-66 percent of the deviation is eliminated after about less three-quarters in the case of *Simple-sum* M1, and *Divisia* M1 and M2; and about less than two-quarters for *Simple-sum* M2.

Table 2
Regression Results: Restricted HPS-S-P-Star Model

Independent Variables	Simple-Sum SM1	Simple-Sum SM2	Divisia M1	Divisia M2
Pt-1 - P*t-1	-0.6205 (11.507)**	-0.3982 (4.9251)**	-0.5868 (12.336)**	-0.6612 (11.861)**
$\Delta \pi_t$-1	-0.2350 (3.2117)**	- 0.6220 (5.2181)**	-0.2514 (3.6106)**	-0.2414 (3.3702)**
$\Delta \pi_t$-2		-0.5451 (3.9589)**		
$\Delta \pi_t$-3		-0.4071 (2.7895)**		
$\Delta \pi_t$-4		0.1040 (0.7407)		
$\Delta \pi_t$-5		0.0932 (0.7670)		
R-squared	0.729	0.855	0.756z	0.741
SER	0.025	0.019	0.024	0.025
D.W.	1.73	1.78	1.81	1.81
LM(4)	2.368 [0.682]	7.674 [0.104]	1.354 [0.851]	3.226 [0.520]

Source: As of The Table 1.

Notes: SER and D.W. denote standard error of regression and Durbin-Watson statistic respectively. LM. (4) is the Breusch and Godfrey's Langrange Multiplier test for residual serial correlation of the fourth-order process. The LM Chi-square statistic for serial correlation with four lags, with four degree of freedom at the 5 percent level is 9.48, Numbers in paretheses (.) and [.] are respectively, t-statistics and p-values. Asterisk (**) denotes statistically significant at the five percent level.

Table 3 presents results of equations with the separate components of the price gap as determinants for inflation equation. It can be observed that the coefficients of the velocity gap and output gap was significantly different from zero for all monetary aggregates used. Except for *Simple-sum* M2, other monetary aggregates required shorter lagged period of dependent variable to eliminate serial correlation in the inflation model. The coefficients of the velocity gaps and output gaps show correctly negative sign. Further, in all cases the constraint of equality of the two gap coefficients cannot be rejected at the five percent level. Hoeller and Poret (1991) have pointed that these results imply that 'no forecasts of actual velocity and output are needed in order to forecast inflation, knowledge of trend velocity; potential output and future money - stock development is sufficient.'

Table 3
Regression Results : Unrestricted HPs-P-Star Model

Independent variables	Simple-Sum SM1	Simple-Sum SM2	Divisia M1	Divisia M2
$v_{t-1} - v^*_{t-1}$	-0.6040	-0.3343	-0.5802	-0.6496
	(10.648)**	(3.6137)**	(11.328)**	(10.904)**
$q^*_{t-1} - q_{t-1}$	-0.6209	-0.3627	-0.5866	-0.6599
	(11.502)**	(3.8099)**	(12.226)**	(11.751)**
$\Delta\pi_{t-1}$	-0.2274	-0.5290	-0.2483	-0.2365
	(3.0847)**	(3.7309)**	(3.5086)**	(3.2583)**
$\Delta\pi_{t-2}$		-0.4388		
		(2.8433)**		
$\Delta\pi_{t-3}$		-0.3597		
		(2.2569)**		
$\Delta\pi_{t-4}$		-0.0485		
		(0.2898)		
$\Delta\pi_{t-5}$		0.0354		
		(0.2023)		
$\Delta\pi_{t-6}$		0.0769		
		(0.4283)		
$\Delta\pi_{t-7}$		0.0804		
		(0.4802)		
$\Delta\pi_{t-8}$		0.1837		
		(1.3434)		
R-squared	0.734	0.869	0.756	0.743
SER	0.025	0.018	0.024	0.025
D. W.	1.74	2.13	1.80	1.82
LM (4)	1.939	6.510	1.288	1.981
	[0.746]	[0.164]	[0.863]	[0.560]
F-test	0.888	2.710	0.134	0.338
	[0.350]	[0.108]	[0.715]	[0.563]

Sourc : As of The Table 1.

Notes : SER and D.W. denote standard error of regression and Durbin-Waston statistic respectively. LM(4) is the Breusch and Godfrey's Langrange Multiplier test for residual serial correlation of the fourth-order process. The LM Chi-square statistic for serial correlation with four lags, with four degree of freedom at the 5 percent level is 9.48. The F-test is a test for the equality that the null hypothesis $\gamma_1=\gamma_2$

Numbers in parenthesses (.) and [.] are respectively, *t*-statistics and *p*-values.

Asterisk (**) denotes statistically significant at the five percent level.

Interestingly, the above results seem to support the HPS-P-Star approach in modelling inflation equation for a developing country such as Nepal. However, this conclusion should be taken cautiously. The validity of the HPS-P-Star approach has been questioned on fundamental ground. For instance, Tatom (1992) and Kool and Tatom (1994) have pointed that the non-stationarity of the price gap is sufficient to invalidate the HPS-P-Star model approach. Non-stationarity of P-P*, implies that the hypothesis that P tends to equal P* in the long-run is rejected.

We have conducted the non-stationarity tests on the price gap, P-P*, using the standard augmenting Dickey-Fuller (ADF) test (Said and Dickey 1984), and these results are presented in Table 4. Our results indicate that the null hypothesis of a unit root can be rejected of majority of the monetary aggregates used to construct P* in Nepal. Only in the case of *Simple-sum* M1 that the null hypothesis of unit root cannot be rejected.

Table 4

Results Of The ADF Unit Root Tests For The Price Gap Series

Price Gap Series	t_{ADF}	Lags	LM(4)
Simple-sum M1	-3.32	12	1.17
Simple-sum M2	-4.39*	8	5.35
Divisia M1	-3.60*	12	2.67
Divisia M2	-4.42*	8	5.75

Source: As of The Table 1

Notes: The relevant tests are derived from the OLS estimation of the following augmented Dickey-Fuller (ADF) regression:

$$\Delta y_t = a + bt + \beta y_{t-1} + \sum_{t=i}^{n} d_i y_{t-i} + v_t$$

Where Δ is the difference operator, t is a linear time trend and v is the disturbance term. The hypothesis that a series contains a unit root is tested by Ho:ß = 0 while the hypothesis that the series is non-stationary with a stochastic trend rather than a deterministic time trend is tested by Ho: b = -ß. Rejection of the latter hypothesis suggests the existence of a deterministic trend τ_t is the t- statistic for testing the significance of ß when a time trend is included in the above equation. In determing the leg length n, we started with one lagged regressor, and proceeded by adding and extra lagged term to the regression until the t- statistic on the last lagged term is greater than 1.6 (approximately the 10 percent critical bound) and the error is white noise. If the error is not white noise the process is repeated by adding another lagged term until the t-statistic on the last lagged coefficient is greater than 1.6 and check the error for white noise. LM(4) is the Breusch and Godfrey's Lagrange Multiplier test for residual serial correlation of the fourth-order process. The calculated statistics are those computed in MacKinnon (1991). The critical value at 5 percent for T = 50 is -3.49 for τ_t

The LM Chi-square statistic for serial correlation with four lags, with four degree of freedom at the 5 percent level is 9.48.

The above results imply that the results of the HPS-P-Star models estimated for *Simple-sum* M1 is spurious in the sense of Granger and Newbold (1974). The ADF tests clearly indicate that the price gap version for *Simple-sum* M1 is non-stationary, however, this price gap variable is significantly different from zero in the HPS-P-Star models estimated in Table 2. This is clearly the case of spurious regression which Granger and Newbold (1974) have earlier warned that including a non-stationary variable in an ordinary least squares regression can yield t-statistics that indicate significant statistical relationships where none actually exist. Nevertheless, in summary our results suggest that monetary data of Nepal supported the HPS-P-Star approach of modelling inflation.

CONCLUSION

Since the work of Hallman et al. (1989) on the use of the P-Star approach for modelling inflation for the United States, there has been a widespread application of the P-Star model in other developed countries. Except for a study by Corker and Haas (1991) for South Korea, the applicability of the P-Star model approach for the developing countries has received less attention among the researchers. Therefore, the objective of this paper is to investigate the robustness of the P-Star model approach of determining inflation in a developing country, in this case Nepal.

In this study, I have also proposed the *Divisia* monetary aggregates both narrow and broad measure, as alternative to the conventional *Simple-sum* aggregate in calculating p*. Generally, the results suggest that Nepal's monetary data seem to support the P-Star model. the results further indicate that *Divisia* monetary aggregates can play an important role as intermediate indicator in Nepal.

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