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Change in Subjective Well-Being, Affluence and Trust in State Governments in India

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Keywords

subjective well-being, trust, state governments, federalism, secularism, India

Disciplines

Civic and Community Engagement | Demography, Population, and Ecology | Econometrics | Family, Life Course, and Society | Politics and Social Change | Social and Behavioral Sciences

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Change in Subjective Well-Being, Affluence and Trust in State Governments in India¹

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The present study explores the relationship between trust in state governments and changes in subjective well-being in India, drawing upon the nationally-representative India Human Development Survey (IHDS) panel data for 2005 and 2012. Our econometric results confirm that people's trust in state governments is positively associated with changes in their subjective well-being in economic aspects. To take into account the endogeneity of people's trust in the state government, we have used the 2SLS model where the trust is instrumented by (i) whether the winning legislators belonged to the ruling party, and (ii) whether the margin of victory over the closest rival exceeded 12 %. The robustness of the results has been confirmed by the Lewbel IV model in which the internal instruments are used in addition to the two external instruments. The policy focus in rebuilding trust in state governments destroyed by the relentless pursuit of Hindutva and over-centralisation are discussed.

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JEL codes: H77, K42, I31, I38

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1. Introduction

Measurement of well-being remains controversial. Specifically, there has been serious questioning of measures of well-being, based on per capita income/expenditure. This has led to alternative measures of well-being. Of particular importance are measures of subjective well-being during the last few decades. Among those who have given strong conceptual and empirical support, some prominent contributions include Clark (2003), Blanchflower and Oswald (2004, 2007), Easterlin (1973, 2006), Kahneman and Krueger (2006), Kahneman and Deaton (2010), Diener et al., (2013), Akay et al., (2017), and Deaton (2011& 2018).

Subjective well-being (SWB) or life evaluation refers to the quality or goodness of lives, overall life satisfaction, or sometimes happiness. Measurement is usually based on the Cantril ladder (1965), wherein individuals are asked to place themselves on an 11-step ladder with the worst possible life representing the lowest rung and the best possible life representing the top rung.

The measurement of SWB, however, has its own critics. Ravallion *et al.* (2016), for example, are sceptical but not dismissive of such measures. Their scepticism rests on scale heterogeneity - the standard deviation of utility over different choice situations. Yet subjective measures of poverty are not just similar to those obtained from income/expenditure thresholds but sometimes unavoidable². Deaton (2018), for example, offers robust support to self-reported measures of well-being, as such measures capture aspects of welfare beyond real income, which is what economists typically use to proxy utility. He uses cross-country and country-specific comparisons to validate measures of SWB and draws out their policy significance.

Here we aim to build on our recent companion study (Kulkarni et al., 2022a) that has analysed the relationship between change in subjective well-being, affluence and trust in politicians. A significant contribution of the present study is the examination of the relationship between change in subjective well-being, Δ SWB, and trust in state governments

²In another contribution, Ravallion (2014) conjectures that different people are likely to have different ideas about what it means to be “rich” or “poor,” or “satisfied” or not with one’s life, leading them to interpret survey questions on subjective welfare differently.

in India. To the best of our knowledge, not only analytical studies of SWB at the all-India level are scanty but also there is none that explores the relationship between SWB and trust in state governments.

The Indian governmental structure is quasi-federal, with a strong central government at the national level (which is a unitary feature) as well as three tiers of government at the national, state, and local levels (which is a federal feature). The state governments have exclusive power to make laws on the provisions mentioned in the state list (except in case of a national emergency in which the national government becomes excessively powerful). Besides, the state governments act as primary sub-national governments and are responsible for making laws in a variety of areas such as public health, sanitation, agriculture, and the police, among others, which affect the day-to-day life of the individual. The respective level of public trust in government can play a pivotal role in influencing the power equations between the governments at national and sub-national levels, because those with greater trust in the state government are more likely to support an increased role of the state government in policy-making rather than the national government (Kumar *et al.* 2020).

Here we examine who trusts the state government and why and whether this trust contributes to change in well-being. Besides, we experiment with IV estimations of trust in state governments -including 2SLS and IV Lewbel estimations - to address the endogeneity concerns and robustness of the results. Through these estimations, we aim to identify causal relationships between changes in subjective well-being and trust in state governments.

2. Scheme

In section 3, we review selectively the literature on subjective well-being and its covariates, followed by a few studies of trust in state governments/or governments in general. Section 4 discusses salient features of the main data source, the India Human Development Survey, conducted by the University of Maryland and the National Council of Applied Economic Research. It is a unique *all-India* panel survey that covers 2005 and 2012. This is followed by a discussion of descriptive statistics, and an examination of whether trust breeds trust over time. Section 5 discusses the model specifications used for the econometric analysis. This is followed by an interpretation of the results based on the 2SLS and Lewbel models. These results are discussed from a broad policy perspective in Section 6. Concluding observations draw attention to the constraints in designing and implementing policy reforms under the present regime NDA led by the BJP in Section 7.

3. Literature Review

As a detailed literature review of subjective well-being (SWB) is already available in Kulkarni et al. (2021, 2022 a), a selective review is given below to reduce the overlap.

(i) *Studies of Subjective Well-Being (SWB)*³

One important empirical issue is whether the measures of SWB are reliable (e.g., Kahneman and Krueger, 2006; Kahneman and Deaton, 2010; Diener et al., 2013; Akay et al., 2017, and Deaton, 2011, 2018). Kahneman and Krueger (2006) argue that one way of partially assessing the validity of SWB measures is to examine their correlations with various individual traits. They argue that (i) recent positive changes in circumstances, as well as demographic variables including education and health, are likely to be positively correlated with happiness or satisfaction; (ii) variables that are associated with low life satisfaction and happiness include: *recent* negative changes of circumstances; chronic pain; and unemployment, especially if only the individual concerned was laid off; (iii) gender is uncorrelated with life satisfaction and happiness; (iv) the effects of age are complex - the lowest life satisfaction is apparently experienced by those who have teenagers at home, and reported satisfaction improves thereafter. They resolve the puzzle of the relatively small and short-lived effect of changes in most life circumstances on reported life satisfaction by invoking evidence on adaptability. They conclude that despite their limitations, subjective measures of well-being enable welfare analysis in a more direct way that could be a preferred alternative to traditional welfare analysis.

Another important study by Diener *et al.* (2013) scrutinises the life satisfaction scales in the global context, based on their critical review of relevant studies and verification of the reliability of the scales used and validity of judgments made in SWB measures. They find that the stability of life satisfaction scores across time and situations suggests that consistent psychological processes are involved and similar information is used when people report their scores, while single-item scales are less stable than multi-item life satisfaction scales. Societal-level mean life satisfaction also shows robust consistency. In brief, the reliability and the validity of life satisfaction scales reflect authentic differences in the ways people evaluate their lives, and the scores move in expected ways to changes in people's circumstances.

³This sub-section draws upon Kulkarni et al. (2021, 2022a) to show the importance of SWB as a welfare metric.

Deaton (2018) is a strong proponent of SWB measures. He argues that SWB measures do not need to be related to behaviour. ‘If decision utility differs from welfare utility, and if people sometimes behave against their best interests, the direct measurement of well-being might still give an accurate measure, and might even enable people to do better, either through paternalistic government policies, or incentives, but more simply by providing information on the circumstances and choices that promote well-being ...’ (*ibid.*, 2018, p. 18). He elaborates that direct measures may also capture aspects of welfare beyond real income, which is what economists typically use to proxy utility. Health is a case in point; education, civil liberties, civic participation, respect, dignity, and freedom are others.

Deaton (2018), based on the Gallup World Poll, uses an evaluative measure of well-being that asks people to report, on an eleven-point scale, from 0 to 10, how their life is going (originally due to Cantril, 1965). His main findings are: average ladder values vary greatly around the world, from around 4 in Africa, to between 7 and 8 in the rich countries of Europe and the English-speaking world; differences between men and women within regions are smaller than differences between regions; women tend to evaluate their lives somewhat more highly than men, except in Africa, and sometimes among those over 60; age patterns are apparent, but neither universal, nor very pronounced, at least compared with those associated with international differences in incomes; the (unconditional) U-shape appears in the English speaking countries (U.K., U.S., Canada, Ireland, New Zealand and Australia), to a lesser extent in East and in South Asia and perhaps in Latin America and the Caribbean - though only in the last age group (65-74), and in Europe—more for men than women—but not elsewhere. In the two poorest regions, Africa and South Asia, life evaluation is low throughout life and, in Africa, it falls with age. However, Deaton is puzzled by the U-shape of well-being, where it exists, since SWB rises after middle age, when people are losing their spouses, and when both morbidity and mortality are rising. In contrast, other components of psychological well-being may improve with age, less stress, and the negative side-effects (e.g., physical pain) of work diminish with retirement.

In an admirably clear and comprehensive review of factors associated with SWB, Dolan et al. (2008) draw attention to ambiguities, inconsistencies and causality in the interpretation of the results. The results generally show positive but diminishing returns to income. Some of this positive association is likely to be due to reverse causation, as indicated by the studies which show higher well-being leading to higher future incomes (Clark, Frijters, and Shields, 2008).

Broadening the scope of the extant literature, we review a small selection of studies that examine the relationship between SWB and trust in public institutions. Before reviewing these studies, something must be said on trust as an analytical category.

Trust is a relational concept that links the subject (who trusts) to the object (that is trusted). Trust is conditional on an object between two individuals, A and B. Trust is thus expressed as A trusts B to do X (Hardin, 2000)⁴. Fehr (2009) argued that trust should be defined in relation with people's behavioural and social preferences and beliefs and found that the survey-based measure of trust is correlated with low levels in betrayal aversion and in risk aversion. Given that preferences are exogenous and beliefs are endogenous in the short run, trust is partly exogenous and partly endogenous, which led the author to argue that how trust was endogenously formed should be taken into account in the empirical analysis.

(ii) *SWB and Trust in Public Institutions*

The only comprehensive study of the causal relationship between subjective well-being (more specifically, change in subjective economic well-being) and trust in politicians is Kulkarni et al. (2022a)⁵. Besides, some key causal relationships between Δ SWB and demographic and socio-economic variables are highlighted. To illustrate, higher political trust causes a perceived change in well-being to rise. However, higher criminality among MPs reaches a threshold at which trust begins to decline. Yet another important insight is corroboration of the contributory role of schooling to perceived well-being. Age is significantly and positively related with Δ SWB. A related finding is that the significant contribution of schooling rises with the number of years of schooling. Relative to rural residents, while urban residents continue to experience higher perceived well-being, its erosion in the near future is not unlikely. Although the caste hierarchy is intact, the results are mixed. Relative to OBCs, SCs are better-off while Others (akin to upper castes) are worse off⁶. Relative to Hindus, as expected, Muslims are not significantly better off while other

⁴ Addition of time to Hardin's definition indicates that trust may change over time — "A trusts B to do X at T" (Bauer and Freitag, 2017).

⁵ Note that trust in politicians and governments are both components of political trust.

⁶ Based on OLS, Fontaine and Yamada (2014) report two important findings. (i) caste does not impact directly but indirectly through another channel. Individuals are often implicitly assumed to compare themselves to their peers. Strong tensions are known to exist between castes. Indians do not compare only to their caste fellows: they also compare to members of the other castes. However, it is only between-caste comparisons that have a strong and negative impact on well-being; (ii) this comparison scheme is asymmetrical. Only low castes are affected by the economic successes of their rivals, whereas only higher-caste Indians compete with their fellows.

religious minorities such as Christians and Others (including Jains, Sikhs and Buddhists) experience higher perceived well-being. So religious harmony makes a significant difference to ΔSWB but not as much as expected. Individual household affluence has a significant effect on perceived well-being. This is hardly surprising as our measure is narrowly focused on a *perceived* change in well-being in economic aspects. Essentially, greater affluence allows a household to do this or that—more specifically, it could engage in leisurely pursuits, ensure better quality schooling for the children and healthcare for household members. However, greater affluence at the state level (measured in per capita net state domestic product per capita) causes a decline in ΔSWB . It is conjectured that the states with low GDPs target public support to the deprived better, and thus show higher ΔSWB . A case in point is Kerala⁷.

(iii) *Trust in Government and Democracy*

Whether people perceive policies and decisions of the government as legitimate or not depends on whether or not they believe the processes used for implementing them are fair and impartial (Erlingsson *et al.*, 2014). Another criterion popular with citizens is the ‘effectiveness’ of the government. Indeed, effectiveness is identified as the ‘instrumental’ criterion which people can use for judging the government. Cheema (2010) argues that citizens are more likely to trust political institutions, government officials, and politicians when the government is perceived as effective and democratic. Muller and Jukam (1977) observe that perception of the government as ineffective results in a lack of confidence in the government.

Several studies observe that an increase in public trust is a means to realising good governance and to achieving better results in terms of reducing administrative costs and increasing the general public’s compliance with rules and regulations (Levi, 1997). The accountability of the government is also a key factor influencing public trust in government

The fact that comparisons between rival castes are made by low-caste Indians bears out Duesenberry’s view (1949) that individuals at the bottom of the hierarchy compare themselves to those at the top but that the reverse does not hold.

⁷ Another recent study of trust in state governments, based on the IHDS, is by Kumar *et al.* (2020). Using a logit model, the authors examine how the level of household confidence in the state government changes with households’ socio-economic status, personal experiences, and benefits received from government programmes and direct social benefit schemes. However, the findings cannot be taken at face value as several explanatory variables are endogenous (eg, life insurance, health insurance, crop insurance, Kisan credit cards, Indira Awas Yojana). Worse, both dependent and explanatory variables relate to 2011/12. Hence the results are vulnerable to reverse causality/association.

(Cheema, 2010). According to Brillantes and Fernandez (2011), a responsive government can play a key role in restoring trust in the government.

Dalton (2005) offers a detailed analysis of how tax compliance varies with the level of political trust. When citizens believe the government is acting for the common good, decisions will be perceived as legitimate and citizens will accept these decisions, and they will be more willing to comply with them on a voluntary basis. Citizens will pay taxes and obey laws because they are members of a community and they consider this as the ‘proper’ thing to do within a political community. Conversely, when citizens distrust such action of government, their willingness to obey government decisions is limited and, in particular, citizens are less willing to pay taxes. Given the importance of taxes for the functioning of any government, a general lack of trust is therefore likely to destabilise the system.

In a more nuanced econometric analysis, Marien and Hooghe (2011) test the hypothesis: are citizens with lower levels of trust in political institutions less willing to obey the law? The analysis is based on European Values Survey (EVS 1999-2000). A multilevel ordered regression model is used in which the dependent variable is not whether the respondent has actually done something illegal, but rather whether the respondent condones these actions (legal permissiveness). The key explanatory variable is political trust and other covariates include age, education, religion, gender, and moral orientation. Respondents with higher levels of political trust are less likely to have permissive attitudes than respondents with lower levels of political trust in various specifications. In other words, those who do not express trust in political institutions have a more permissive attitude toward lawbreaking behaviour than those with higher trust levels.

It is further contended that political trust also impacts the capability of government systems to fulfil their basic tasks towards the population. This would imply that low levels of political trust can pose a challenge for the governability of contemporary liberal societies. Indeed, in the worst-case scenario, a vicious cycle emerges for governments and political trust without necessarily insisting that democracy will be at risk.

4. Data and Descriptive Analysis

(a) Data

Our analysis draws upon the two rounds of the nationally-representative *India Human Development Survey* (IHDS) data for 2005 and 2012, collected jointly by the University of

Maryland and the National Council of Applied Economic Research, New Delhi. The first round (IHDS-1) is a survey of 41,554 households in 2004-5. The second round (IHDS-II) involves re-interviews with 83% of the original households as well as split households residing within the same locality, along with an additional sample of 2,134 households in 2012⁸. The total for IHDS-II is therefore 42,152 households. The sample is spread across 33 (now 34) states and union territories, and covers rural as well as urban areas. Repeated interviewing of the same households at two points in time facilitates a richer understanding of which households are able to partake in the fruits of growth, what allows them to move forward, and the process through which they are incorporated into or left out of a growing economy.

Topics covered by the IHDS relevant in the present context include perceived changes in subjective well-being (SWB) in economic aspects, expenditure, income, employment, health insurance, castes, religion, assets, trust in institutions, and demographic characteristics (e.g. gender, age, marital status)⁹.

An important feature of IHDS is that it collected data on SWB changes. The question asked is: “Compared to 7 years ago, would you say your household is *economically* doing the same, better or worse today?”. So the focus of this SWB is narrow and it has only three scales corresponding to *the perceived change* in it (denoted as Δ SWB hereafter), not its level. It should also be noted that the measure is at the household level, not the individual level. While the focus of this variable is narrow, it has a few advantages. First, as reviewed in detail in the previous section, there exists a life-cycle effect on SWB, that is, perceived well-being changes at the point of the life-cycle or age of the respondent as well as his/her spouse or other household members. While the survey question asks about the change in SWB compared to that 7 years ago, it can be different from the time-series comparison of the level

⁸An additional sample of 2134 households was added to the urban sample of IHDS-II to reduce the impact of attrition on the standard errors of a few key variables. The simulations estimated that the attrition would increase standard errors to unacceptable levels if 8 out of 15 households were unreachable in each urban cluster. Hence, the interviewers were asked to report to NCAER supervisors if they were unable to recontact 5 or more households in a cluster. The supervisor verified the losses and randomly assigned households to the right, the left, or at the original location based on the original locations of the households which were not observed in 2012 using a predefined rule. A similar addition to the rural sample was not attempted because of much lower attrition rates (Personal communication with Sonalde Desai who led both rounds of IHDS).

⁹It is noted that IHDS-1 in 2005 does not allow identification of the respondent, while IHDS-II in 2012 does. As the respondents reported SWB changes between 2005 and 2012 at the household level in IHDS-II, we have matched SWB changes, a dependent variable, to household head’s characteristics, and other explanatory variables, by restricting the sample only to the case where the household head served as a respondent.

in SWB because of the stronger effect of more recent experiences of negative shocks (e.g., death of a breadwinner) on SWB. In this sense, our proxy is likely to be more closely associated with SWB at the time of the survey (2012) rather than 7 years ago (2004-05), although given that this is a longitudinal survey, the individuals are expected to retain some memories of the last survey as a reference point. Second, by asking specifically about economic well-being, the respondents will perceive the same aspect in well-being. This will minimise the heterogeneity in the respondent's perceptions or focus on well-being compared with the variable based on more general questions about happiness or 'the best possible life'. Third, while most of the earlier studies asked about the individual SWB, our measure captures Δ SWB at the household level. Since the life-cycle effect is somewhat diluted, this has the advantage that it allows analysis of the household-level covariates of Δ SWB.

Detailed expenditure data are collected based on 52 questions about household expenditure. The location of households is classified into rural, urban (net of slums) and slums. Five caste categories are considered: Brahmins, High Castes, Other Backward Classes (OBCs), Scheduled Castes (SCs/*Dalits*), Scheduled Tribes (STs/*Adivasis*) and a residual "Other" category.

Marital status is disaggregated into unmarried, married, and widowed/separated.

IHDS obtains labour force participation data as part of its detailed income questions. Work participation includes farm, business, and wages/salary. Within each income section, IHDS asks who in the household participated in this activity and what their level of participation was. Detailed demographic data are collected including gender, age, schooling and marital status. At the household level, the highest schooling attainment of adult women and adult men are taken from individual education records. Adults are defined as individuals 21 years or older. Based on the number of years of schooling, individuals are classified into illiterates, those with primary schooling, middle-level schooling, matriculates and graduates.

Net state domestic product (NSDP) per capita at constant prices is obtained from state economic surveys. We use its log transformation as an explanatory variable.

A unique feature of IHDS is that it asks a question on trust in public institutions such as state government, judiciary, police and politicians. Trust is measured in *ordinal* levels of confidence: a great deal of confidence, only some confidence and hardly any confidence. We create an indicator variable on whether a head of the household trusted in the state

government or not by bundling the first two categories (=1) to be contrasted with the last category (=0). Our focus here is thus confined to the relationship between the household head's perceived change in SWB in the economic aspect (Δ SWB) and trust in the state government. In order to instrument trust in state governments, we use two variables: MLAs' margin of victory relative to the closest rival; and the proportion of MLAs that belonged to the party which ruled in the state. The data are taken from Association of Democratic Reform (ADR) which provides data on MLAs, their party affiliations and margin of victory.

(b) Descriptive Analysis

A broad-brush treatment of changes in SWB is given below.

In 2012 relative to 2005, 9.71% of the respondents expressed that they were worse- off, 50.34% reported that they were just the same, and 39.95% were better- off. Hence the people who felt just the same made up the highest share.

The sample was disaggregated into five age groups: 15–30 years, 31–50 years, 51–60 years, 61–70 years, and >70 years. Three striking features are that in all the age groups, the proportion of individuals who felt that their position was just the same was highest and varied little; the proportion of the better-off group was well below that of just the same group, but there was a decline across age groups and the proportion of worse off group was low but rose among older people.

In rural areas, the highest proportion is of those who report that their well-being is just the same (about 55 %) while that of the better-off is much lower (well under 35 %). In sharp contrast, in urban areas, the highest proportion is of the better-off. Urban slums, however, are similar to rural areas, as the proportions of just the same are highest and of the same magnitude, and that of the better-off is slightly higher in the former.

Barely about 11 % of the households report a great deal of trust in the politicians, about 34 % show only some trust, and a majority (over 56 %) report hardly any trust.

Cross-tabulations of trust in state governments in 2005 by trust in state governments in 2012 yield interesting insights.

At the all-India level, the share of those with a great deal of confidence in state governments rose from over 27.50 % in 2005 to just under 31 % in 2012; of those with some confidence fell from over 51 % to about 49 %; and of those with hardly any confidence decreased from

over 21 % to about 20 %. Thus the changes were small except that the share of those with a great deal of confidence rose.

Disaggregation by religion brings out interesting contrasts. Among Hindus, the share of those with a great deal of confidence in state governments rose from over 28 % in 2005 to well over 31 % in 2012; of those with only some confidence fell from well over 51 % to about 49 %; and among those with hardly any confidence decreased slightly from 20.60 % to 19.75 %. Hence the changes in trust were small except that the share of those with a great deal of confidence rose. Among Muslims, the share of those with a great deal of confidence rose from well over 23 % to about 30%-a sharper rise compared with Hindus; the share of those with only some confidence fell from well under 53 % to under 48 %; and of those with hardly any confidence remained almost unchanged at about 23 %. That Muslims experienced a larger increase in the share of those with a great deal of confidence *despite* being a minority and often a victim of discrimination is indeed surprising, and reinforces the secularist credentials of the UPA. Among “Others”-which lumps together Christians, Sikhs and Buddhists-there is hardly any change in the share of those with a great deal of confidence (under 29 % in both years); in contrast, however, the share of those with only some confidence rose from well under 48 % to about 51.50 %; however, the share of those with hardly any confidence decreased from 24.50 % to well under 23 %.

Salience of the caste hierarchy has remained intact despite inter-caste marriages and upward income mobility of the lower rungs (eg, SCs). Among Brahmins at the top of the hierarchy, the share of those with a great deal of confidence increased from about 26.50 % to about 28.50 %; of those with only some confidence fell from 49 % to 48 %; and of those with hardly any confidence decreased from 25.50% to well under 23 %. A different pattern is found among High Castes. The share of those with a great deal of confidence fell slightly-from well over 27 % to a little over 26 %; of those with only some confidence remained almost unchanged at about 51 %; however, the share of those with hardly any confidence rose moderately-from about 21.50 % to over 23 %. Among OBCs, the share of those with a great deal of confidence increased from over 29 % to well over 31 %; of those with only some confidence remained unchanged at about 49.50 %; and of those with hardly any confidence also remained almost unchanged at about 20 %. Dalits belong to the lower rung of the caste hierarchy. The share of those with a great deal of confidence rose from under 27.50 % to 33.50 %; of those with only some confidence decreased from over 52 % to under 49 %, as also of those with hardly any confidence from under 20.50 % to just under 18 %. That they

benefited from the quotas in schooling and public employment is part of the explanation. A slightly different pattern emerges for Adivasis-the lowest rung and the most isolated spatially. The share of those with a great deal of confidence rose from under 30.50 % to 33.50 %; of those with some confidence, however, decreased from 53.50 % to over 46 %; of those with hardly any confidence rose from over 16 % to well over 20%. In the residual group of “Others” , likened to upper castes, the share of those with a great deal of confidence rose sharply from 22.50 % to well over 30 %; while of those with only some confidence fell from under 53 % to about 48.50 %; as also of those with hardly any confidence from under 25 % to under 21.50 %.

The last set of cross-tabulations examine the associations between trust in state governments and per capita expenditure terciles. In the first and lowest tercile (or the bottom 33 %) of households, the share of those with a great deal of confidence increased from over 28 % to over 35 %; while of those with only some confidence decreased from under 52 % to well under 47 %; as also of those with hardly any confidence from over 20 % to over 18 %. In the second tercile/middle expenditure group, a slightly different pattern is observed. The share of those with a great deal of confidence increased from under 28.50 % to over 29.30 %; however, of those with only some confidence decreased from under 54 % to 50.50 %; but of those with hardly any confidence remained almost unchanged at about 20 %. In the third tercile/or relatively affluent, the share of those with a great deal of confidence remained almost unchanged at about 28.50 %; of those with only some confidence, however, increased slightly from well under 49 % to about 50 %; but of those with hardly any confidence decreased slightly from 23% to under 21.50 %.

We address a related issue: does trust in state government breed trust over time? In order to do so, we throw light on fractions from each trust category in 2005 that remained or moved up into the category of a great deal of confidence in 2012 and the fractions that descended into hardly any trust.

At the aggregate level, we find that just under 32.50 % of those with a great deal of confidence in 2005 remained in the same category in 2012 while over 19.50 % descended into the category of hardly any confidence. Among those with only some confidence, under 30.50 % moved up into a great deal of confidence while under 20 % descended into hardly any confidence. What is perhaps most striking is that, even among those with hardly any

confidence, just under 30.50 % recorded a great deal of confidence while under 21.50 % remained in the same category.

A disaggregated analysis by religion throws up interesting contrasts. Among Hindus, the share of those with a great deal of confidence who retained it was just under 32.50 % while that of those who descended into hardly any confidence was about 19 %. Among those with only some confidence, 30.50 % moved up into the category of a great deal of confidence while well under 20 % descended into hardly any confidence. Among those with hardly any confidence, it is indeed striking that over 31 % moved up into a great deal of confidence while about 21 % descended into hardly any confidence. There is some variation in the pattern among Muslims. Under 32.50 % of those with a great deal of confidence in 2005 retained it in 2012 while under 22.50 % descended into hardly any confidence. Among those who had only some confidence under 30.50 % moved up into a great deal of confidence while well under 23 % descended into the category of hardly any confidence. Among those with only some confidence under 30.50 % moved up to a great deal of confidence while well under 21 % descended into hardly any confidence. Just under 27 % of those with hardly any confidence moved up into a great deal of confidence while a little over 19 % remained in the same category. Among “Others”, the share of those with a great deal of confidence who retained it was just under 30.50 % and of those who descended into hardly any confidence was under 22 %. Among those with only some confidence, the share of those who moved up into a great deal of confidence was just under 28 % while of those who descended into hardly any confidence was under 19.50 %. Among those with hardly any confidence, the share of those moving up into a great deal of confidence was well under 28 % while of those who remained in the same category was over 19 %.

Among Brahmins, the share of those with a great deal of confidence who retained it was under 27 % while of those who descended into hardly any confidence was well over 18 %. Within those with only some confidence the share of those who moved up into a great deal of confidence was over 27 % while of those who descended into hardly any confidence was well over 23 %. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was well over 33 % while of those who remained in the same category was well over 26 %. Among High Castes, the share of those with a great deal of confidence who retained it was under 29 % while of those who descended into hardly any confidence was under 21.50 %. Among those with only some confidence the share of those who moved up into a great deal of confidence was well under 26 % while of those who

descended into hardly any confidence was under 24 %. Within those who had hardly any confidence the share of those who moved up into a great deal of confidence was under 23.50 % while of those who remained in the same category was under 23.50 %. This is the first case in which both shares were equal.

Under OBCs, out of those with a great deal of confidence the share of those who retained it was under 34 % while of those with hardly any confidence was well under 19 %. Among those with only some confidence the share of those who moved up into a great deal of confidence was over 29 % while of those with hardly any confidence was a little over 19 %. Among those with hardly any confidence the share of those who moved up into a great deal of confidence was 33 % and of those who remained in the same category was under 20.50 %.

At the lower rung are Dalits. Among them the share of those who retained a great deal of confidence was well over 32 % while of those who descended into hardly any confidence was well under 22 %. Among those with only some confidence the share of those who moved up into a great deal of confidence was over 35 % while of those with hardly any confidence was over 16.50 %. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was nearly 31% and of those who remained within the same category was a little over 20 %.

At the lowest rung are *Adivasis*. Among them, the share of those who retained a great deal of confidence was under 35 % while of those with hardly any confidence was well under 22 %. Among those with only some confidence, the share of those who moved up into a great deal of confidence was just under 33 % and of those who descended into hardly any confidence was under 20 %. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was under 34 % while of those who remained within the same category was just under 19 %.

In the residual caste group, "Others", the share of those who retained a great deal of trust was under 32.50 % while of those with hardly any confidence was under 21.50 %. Among those with only some confidence the share of those who moved up into a great deal of confidence was just under 30.50%. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was 29 % while of those who descended into hardly any confidence was under 23 %. Among those with hardly any confidence the share of those who moved up into a great deal of confidence was 28 % while of those who remained in the same category was just under 23 %.

Turning to an economic indicator, per capita expenditure tercile, we find that in the first tercile the share of those who retained a great deal of confidence was just under 35.50 % while of those with hardly any confidence was well under 19%. Among those with only some confidence well under 37 % moved up into a great deal of confidence while over 17 % descended into hardly any confidence. Among those with hardly any confidence the share of those who moved up into a great deal of confidence was 31 % while of those who remained in the same category was over 20 %.

In the second tercile/the middle-income class, the share of those who retained a great deal of confidence was over 32 % while of those who descended into hardly any confidence was well over 20 %. Among those with only some confidence the share of those who moved up into a great deal of confidence was just under 28 % while of those who descended into hardly any confidence was well under 20 %. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was under 30 % while of those who remained in the same category was under 22 %.

In the third tercile/or relatively affluent, the share of those who retained a great deal of confidence was under 30 % while of those who descended into hardly any confidence was just under 20 %. Among those with only some confidence, the share of those who moved up into a great deal of confidence was over 27 % while of those who descended into hardly any confidence was over 22 %. Among those with hardly any confidence, the share of those who moved up into a great deal of confidence was under 30.50 % while of those who remained in the same category was under 22 %.

To sum up, in almost all cases there was a net gain of confidence (share of those with a great deal of confidence minus that of who descended into hardly any confidence or remained in the same category). This suggests that trust in state governments breeds trust over time. Another significant finding is that across religions, castes and expenditure terciles, the more deprived recorded larger gains in confidence compared with those less deprived or better-off. Part of the explanation lies in their greater dependence on social safety nets, and protection from those belonging to upper castes, dominant religion and hostility of the rich and powerful.

(c) India's Federal System

Economic liberalisation side-lined welfare as it was traditionally practised and heightened social tension and alienation. At the same time, when the Congress-led United Progressive Alliance (UPA) introduced a new welfare regime, it was quite different from the earlier model in that it built on shifting understandings of the relationship between the state, market, and its citizens. These included the use of principles of choice in health insurance policies, and a shift from employer to state responsibility for social security. There has been substantial variation across states in how they adapted to, and themselves shaped, these shifts at the local level. Furthermore, states themselves, both before and after 2004, have been important originators of new social policies, some of which have also been scaled up.

Deshpande *et al.* (2017) make several important points about the role of state governments in shaping and implementation of social policies¹⁰. It is in the process of implementation at the local level that policies are themselves shaped and reinvented in important ways. Against this backdrop, a large proportion of social sector expenditure took place at the state level. For instance, about 90 percent of total expenditure in health and education occurs at the state level.

Attention is drawn to a few landmark shifts and reforms during the UPA regime. These included a major public employment programme for rural households (Mahatma Gandhi National Rural Employment Guarantee Act 2005), the Social Security for Unorganised Workers Act, 2008, which included health insurance for informal sector workers (*Rashtriya Swastha Bima Yojana*); and the National Food Security Act 2013, which expanded the coverage and lowered the prices at which subsidised food is available to poor households. Besides, these programmes imparted a statutory backing to the entitlements or “rights” they offered (Deshpande et al. 2017).

State governments were at the forefront of the new welfare regime. At the same time, when the UPA introduced a new welfare regime, it built on evolving understandings of the relationship between the state, market, and its citizens. Health insurance policies offered choice, and the shift from employer to state responsibility for social security was significant. Unsurprisingly, substantial variation was observed across states. Furthermore, states themselves, both before and after 2004, have been important originators of new social

¹⁰ For insightful case studies of states, see Deshpande et al. (2017). Briefly, paired comparisons of two states (Tamil Nadu-Kerala, and Maharashtra-West Bengal) are carried out to demonstrate the ways in which subnational political environments shape social policy.

policies, some of which have also been scaled up to the national policy. An example is Andhra Pradesh's *Aarogyasri* health insurance scheme (Deshpande et al. 2017).

Dramatic changes in governance and fiscal federalism occurred under the NDA. Since 2014, there has been a shift toward greater political congruence between governments elected at the state level in India's federal system and at the centre. A new phase of single-party dominance began, and with this, the BJP at the centre has pushed ahead relentlessly its One Nation agenda (Aiyar and Tillin 2020). More on this later.

5. Methods

(a) *Model Specifications*

To serve as the basis for more refined models, we begin with a multiple regression model where the dependent variable, ΔSWB (0, 1, 2), corresponding to 'worse-off', 'just the same' or 'better-off' - is estimated by a set of explanatory variables using OLS.¹¹ Because ΔSWB is the perceived change of economic well-being during the last 7 years, based on the household head's perception in 2012, all the explanatory variables are based on the survey questions in 2005 to partially address the issue of reverse causation from ΔSWB to, for instance, income/expenditure.

A multiple regression model is expressed as:

$$y_i = \beta_0 + \beta_1 T_i + X_i \beta_2 + \varepsilon_i \quad (1)$$

where y_i is ΔSWB , the change in subjective well-being in economic aspects between 2005 and 2012 and i stands for an individual where the household head was a respondent in 2012 (where i takes 1, ..., 27,958). β_0 is a constant term. ε_i is an error term assumed to be independent and identically distributed.

Our main explanatory variable is denoted as T_i , whether a household head had trust in the state government. Our main question is whether trust in state governments is associated with improvement in perceived well-being, tested by examining the sign and the statistical significance of β_1 .

¹¹See Angrist and Pischke (2008) for a detailed argument in favour of the Linear Probability Model (LPM) over the probit model where OLS is used for a binary choice model, against the standard textbook recommendation for the use of probit or logit models for the binary variable. The use of OLS for the discrete variable (0, 1, 2) can be justified on the same grounds. OLS with robust clustered standard errors is used to address possible correlations between individuals within a household as well as heteroscedasticity.

X_i denotes a vector containing a number of other explanatory variables and β_2 is a vector of coefficients to be estimated. X_i includes the age of the household head and its squared term, log per capita expenditure, caste, religion, marital status, gender, location-rural, urban (net of slums) and slums, schooling years, and state domestic product per capita, all in 2005.

However, the variable on trust in the state government, T_i , may be endogenous in Equation (1) because, for instance, the extent to which the individuals trust the state government is likely influenced by their experience and the resulting perception of their economic circumstances that can be affected by the state's policies. It is also argued that an unobserved factor not captured by X_i affects both the change in subjective well-being in economic aspects and people's trust in state governments. We therefore instrument T_i by using a 2SLS (two-stage least squares) estimation. In the first stage, we estimate T_i by two instruments, z_{1i} and z_{2i} (Equation (2)) and in the second we estimate Equation (1) based on the estimate of Equation (2) in the first stage.

$$y_i = \beta_0 + \beta_1 T_i + X_i \beta_2 + \varepsilon_{1i} \quad (1)'$$

$$T_i = \alpha_0 + \alpha_1 z_{1i} + \alpha_2 z_{2i} + X_i \alpha_3 + \varepsilon_{2i} \quad (2)$$

In the main specification based on 2SLS, we use the margin of victory of MLAs (z_{1i}) and whether they belonged to the party that ruled in the state (z_{2i}) for T_i , trust in state government¹². It is hypothesised that the greater the margin of victory in the legislative assembly election, the more likely it is that the elected MLA will act in ways that will not necessarily serve the interests of the electorate better. Overconfidence breeds arrogance and neglect of weaker sections. Besides, if an MLA belongs to the same party that rules in the state, there is hardly any incentive to correct the failures of the ruling party.

However, it is not easy to verify the validity of the instruments, z_{1i} and z_{2i} , in terms of exclusion restrictions even if the instruments are carefully selected, as discussed above. Therefore, we also apply the Lewbel IV estimator which has been proposed as an alternative method of estimating Equations (1)' and (2) (Lewbel, 2012; Baum and Lewbel, 2019). The

¹²In principle, trust in state governments in 2005 should be instrumented by margin of victory and whether the MLA belonged to the ruling party in the state in 2005. As the results were counter-intuitive, we opted to instrument trust in 2012 on the instruments in 2005. Note that y_i , Δ SWB, is the respondent's perceived change in subjective well-being in economic aspects between 2005-2012, based on the survey data in 2012. Hence y_i reflects strongly the respondent's perception in 2012 as well as the changes which occurred recently, rather than the actual changes in the subjective well-being between 2005 and 2012. The perception in 2012 is found to be more strongly influenced by T_i , trust in state governments in 2012, than T_i in 2005, and thus our use of T_i in 2012 is justified.

Lewbel IV draws upon the two-step estimation where (i) in the first step it estimates α_0 , α_1 , and α_2 by OLS where T_i , the trust variable, is regressed on the instruments, z_{1i} , z_{2i} , and X_i and thus obtain the estimated residuals, $\hat{\varepsilon}_{2i}$; and (ii) in the second step it estimates β_1 and β_2 by 2SLS of y_i (Δ SBW) by X_i and T_i using external instruments, z_{1i} , z_{2i} as well as internally generated instruments created by the estimation (i) or $(X_i - \bar{X}_i)\hat{\varepsilon}_{2i}$ where \bar{X}_i is the sample mean of X_i (Baum and Lewbel, 2019). This procedure ensures that internally-created instruments are uncorrelated with the product of heteroscedastic errors (Lewbel, 2012). We use Lewbel IV as an attempt to strengthen the instruments and as a robustness check of 2SLS. The result will be discussed in detail in the next section.

(b) Results

A list of variables and their descriptive statistics are given in Table 1. These are the variables used in the econometric analyses.

Table 1
Summary Statistics

Variables	Mean	SD	Min	Max
Δ SWB	1.286	0.634	0	2
Whether a household head had trust in the state government in 2012 (1 or 0)	0.302	0.094	0.121	0.481
Member Ruling Party	0.241	0.428	0	1
Margin of victory > 12%	0.428	0.495	0	1
Age	46.0	12.5	16	97
Age Square	2268	1220	256	9409
Log per capita expenditure	6.491	0.666	1.386	10.578
Gender				
Male	0.898	0.302	0	1
Female	0.102	0.303	0	1
Marital Status				
Married	0.865	0.342	0	1
Unmarried	0.010	0.099	0	1
Widowed/Divorced	0.125	0.331	0	1
Sector				
Rural	0.717	0.450	0	1
Urban	0.266	0.442	0	1
Urban Slum	0.018	0.132	0	1
Education				
Illiterate	0.357	0.479	0	1
1-4	0.116	0.320	0	1
5-8	0.234	0.423	0	1
9-10	0.167	0.373	0	1

>10	0.125	0.331	0	1
Religion				
Hindu	0.831	0,374	0	1
Muslim	0.108	0.310	0	1
Christian	0.025	0.156	0	1
Others	0.036	0.186	0	1
Caste				
Brahmin	0.049	0.215	0	1
High Caste	0.152	0.359	0	1
OBC	0.366	0.481	0	1
Dalit	0.222	0.416	0	1
Adivasi	0.082	0.275	0	1
Others	0.130	0.336	0	1
Log - Net State Domestic Product	9.983	0.430	8.976	11.065

Source: Computed by the authors from the IHDS.

(i) **2SLS**

The reduced form 2SLS results of trust in state governments are displayed in the first column of Table 2. As discussed earlier, we use two instruments: whether the winner in the state election or MLA belonged to the ruling party and whether the margin of victory of the winner over the closest loser exceeded 12 %. Both are statistically significant and negative, implying that trust in state governments reduced when the winner belonged to the ruling party and the margin of victory exceeded 12 %. As indicated earlier, if the ruling party underperformed, its success in state elections would lower the citizens' confidence. Besides, the greater the margin of victory of the winning MLA (in excess of 12 %), the lower is the trust of the citizens in state government. That is, if the winning legislators belonged to the ruling party, the respondent (or the household head) is 13% *less* likely to trust the state government with all the other covariates in the first-stage equation being unchanged. On the other hand, if the margin of victory of the winner over the closest loser exceeded 12%, the household head is 5% *less* likely to trust the state government, all the other covariates unchanged. So the magnitude of the change in the trust in response to these instrumental variables is non-negligible.

The F-statistic is well above the Stock-Yogo critical value of 19.93 (shown at the bottom of Table 2). This implies that the maximum relative bias of 2SLS estimates (compared with OLS) is less than 10%, leading us to conclude that there is no weak instrument problem (Stock and Yogo, 2005). However, the Hansen J statistic (Chi-square (1) = 30.39) is significant which raises some doubt about the exclusion restrictions (see the bottom of Table 3). The basic idea of the J-statistic is that if both instruments are exogenous, then the two

2SLS estimators using the individual instruments are consistent and differ from each other because of random sampling variation. If, however, one of the instruments is exogenous and the other is not, the estimator based on the endogenous instrument is likely to be inconsistent, as implied by a statistically significant J-statistic (Stock and Watson, 2018). So while the instruments are strong, because of some concerns over the exclusion restrictions, we avoid making any causal statement.¹³

Table 2
Correlates of Trust in the State Government (the First-Stage of 2SLS and Lewbel IV)

Explanatory Variables	2SLS		Lewbel IV	
	Coeff	(s.e.)	Coeff	(s.e.)
Member Ruling Party	-0.133***	(0.000929)	-0.13259***	(0.00114)
Margin of victory > 12%	-0.0496***	(0.00101)	-0.05696***	(0.00103)
Age	3.23e-05	(0.000196)	0.00015	(0.00018)
Age Square	1.23e-06	(2.00e-06)	5.00e-08**	(1.89e-06)
Log per capita expenditure	-0.00689***	(0.000704)	-0.00396***	(0.00067)
Gender				
Female	0.00263	(0.00212)	0.002	(0.00204)
Marital Status				
Unmarried	0.00698	(0.00430)	0.0053	(0.00409)
Widowed/Divorced	0.00187	(0.00198)	0.00273	(0.00190)
Sector				
Urban	0.00509***	(0.000830)	0.00414***	(0.00085)
Urban Slum	0.0206***	(0.00316)	0.01737***	(0.00254)
Education				
1-4	0.0135***	(0.00133)	0.01269***	(0.00122)
5-8	0.00810***	(0.00112)	0.00862***	(0.00102)
9-10	0.00704***	(0.00122)	0.0092***	(0.00120)
>10	0.00950***	(0.00136)	0.00925***	(0.00136)
Religion				
Muslim	-0.0519***	(0.00343)	-0.05114***	(0.00427)
Christian	0.0123***	(0.00296)	0.01548***	(0.00338)
Others	-0.00807***	(0.00291)	-0.01672***	(0.00308)
Caste				
Brahmin	-0.00879***	(0.00190)	-0.01145***	(0.00175)
High Caste	-0.0141***	(0.00112)	-0.01476***	(0.00117)
Dalit	-0.00716***	(0.00104)	-0.00711***	(0.00093)

¹³ It should be noted, however, that Hansen (2021) is cautious and suggests that the Hansen J test should not be used as a definitive test for validating or invalidating the IV model given the ambiguous nature of the test. He notes that ‘...it seems reasonable to require strong evidence to lead to the conclusion “Let’s reject this model”’. The recommendation is that mild rejections (p-values between 1% and 5%) should be viewed as mildly worrisome but not critical evidence against a model. *The results of an over-identification test should be integrated with other information before making a strong decision.*’ (Hansen, 2021, p. 378, emphasis added by the authors). Therefore, given that the instruments are strong, despite the result of the Hansen J test, our 2SLS and Lewbel results should have empirical significance, while the available data would not allow us to find a case where the Hansen J statistic is statistically non-significant. The results of OLS are broadly similar to those of 2SLS or Lewbel models, but we present only the results of the 2SLS and Lewbel IV models since the first-stage results are meaningful. The results of OLS will be provided on request.

Adivasi	-0.00365	(0.00224)	-0.00251	(0.00184)
Others	0.0333***	(0.00335)	0.03169***	(0.00419)
Log - Net State Domestic Product	-0.0511***	(0.000947)	-0.05017***	(0.00103)
Constant	0.904	(0.0109)	0.87799	(0.01140)
Observations	29,543		29,543	
F test of excluded instruments	F(2, 29519) = 10351.26***		F(23, 29498) = 1218.60***	
	Prob > F = 0.0000		Prob > F = 0.0000	
Stock and Yogo's (2005) critical value	10% maximal IV size 19.93		10% maximal IV size 11.41	

Notes: Robust standard errors in parentheses . *** p<0.01, ** p<0.05, * p<0.1

Let us first consider the demographic variables. Neither age nor its square are significant; nor are gender and marital status¹⁴. However, location - living in urban areas (net of slums) and slums - display higher confidence/trust in state governments, relative to rural households. If a household is located in urban areas (urban slums), the household head is 0.5% (2.1%) more likely to trust the state government than those in rural areas. These results are plausible as their perception of confidence/trust in state governments is likely to be shaped by their easier access to social safety nets (e.g., mid-day meal scheme for school children, pensions, PDS), and local public goods such as public schooling and health care.

Schooling is a form of human capital with not just more remunerative employment options but also with positive externalities of a better informed and more responsible citizenry. It is found that, relative to no schooling, each category/grade of schooling has a similar magnitude of a positive association with trust in the state government with some degree of non-linearity found as the level/grade of schooling increases. The household head without any schooling which serves as a default/comparison category is least likely to trust the state government since all the coefficient estimates of four education grades show positive and significant coefficient estimates. Interestingly, the household head with only 1-4 years of schooling at the primary level is most likely (i.e., 1.4% more likely than those without any schooling) to trust the state government. This is followed by those with highest schooling (10 years or more) who are 1.0% more likely to trust the state government than those without schooling, those with 5-8 years of schooling (+0.8%) and those with 9-10 years of schooling (+0.7%) - all compared with those without schooling. This implies that schooling is associated with moderate trust in the state government. However, the absolute magnitudes of the differences across different education groups are relatively small.

¹⁴ As age and its square may be collinear, their standard errors are likely to be imprecise. Hence their non-significance should not be taken at face value.

Religion is also associated with significant differences in trust in the state government. Predictably, despite a more secular UPA regime (compared with the subsequent NDA regime with a strong positive bias for Hindus), Muslims on average are least likely to trust the state government among all the religion groups, 5.2% less likely to have confidence in the state government than the omitted group of Hindus, all the other covariates being unchanged. On the other hand, another minority group of Christians on average is most likely to trust the state government among all the religion groups, 1.2% more likely than Hindus, (i.e., 6.4% (5.2% *plus* 1.2%) more likely than Muslims), to trust the state government. ‘Others’ displays a negative coefficient estimate, that is, they are 0.8% less likely to trust the state government than Hindus. However, their confidence level is not much different from the Hindus’ (in terms of the absolute magnitude of coefficient estimates) and 4.4% (5.2% *minus* 0.8%) *higher* than Muslims who are least likely to trust the government.

Caste hierarchy persists and the economic and social mainstreaming of lower castes is elusive *despite* affirmative action and their upward economic mobility. However, the pattern of associations is intriguing, relative to the omitted group of OBCs. Both upper castes and lower castes display negative associations while the residual group of ‘Others’ shows a positive association with trust in the state government. That is, the household head in ‘Others’ is most likely to trust the state government, 3.3% more likely to have confidence than OBCs. This is followed by *Adivasis* (0.4% less likely than OBCs to trust the state government – though statistically a non-significant coefficient estimate), Dalit (0.7% less likely to trust the state government than OBCs), Brahmins (-0.9%), and High Caste (-1.4%), which is least likely to trust the state government. It seems plausible that while upper castes resent affirmative action for SCs/STs, even if their catch up is slow but consistent. On the other hand, lower castes resent their limited access to social safety nets and being on the fringe of the social and economic mainstream. As ‘Others’ are akin to upper castes, and if the gap between their aspirations and achievements narrows due to progressive state policies (e.g., through better provision of public goods and services such as public schooling and healthcare), they are likely to repose greater trust in state government. However, we avoid making strong inferences as the absolute magnitudes of differences are relatively small.

Let us now consider two measures of economic affluence: per capita expenditure and state domestic product per capita (both in logs). Both more affluent households and states show statistically significant negative associations with trust in state governments. If affluent households bear the brunt of taxation and a large share of the revenue finances social safety

nets and weak law enforcement agencies, this may in part plausibly explain the lower trust of the more affluent. If the per capita household expenditure increases by 1%, the household head is 0.7% less likely to trust the state government. Besides, if more affluent states tend to underperform in the provision of public goods (e.g., poor quality of public health infrastructure and of schooling), this is likely to be a plausible basis for lower trust in state governments. A 1% increase in the net state domestic product is associated with a 5.1% decrease in the probability of the respondent trusting the government.

Let us now turn to column 1 of Table 3 for covariates of the household head's perceived change in subjective well-being in the economic aspect (Δ SWB), the second stage results of 2SLS. We focus especially on how Δ SWB is associated with trust in the state government predicted in the first stage of the 2SLS model (\hat{T}). We find that there is a statistically significant and positive association between trust in the state government and Δ SWB. This implies that, if the household head has confidence in the state government, he or she is 22.6% more likely to perceive a positive change in subjective well-being in economic aspects in 2005-12 (i.e., moving one step up the ladder of Δ SWB defined earlier). As discussed earlier, while we have attempted to take into account the endogeneity of \hat{T} , we will not draw any causal inference given that the Hansen J test statistic is statistically significant.

Table 3
Correlates of Δ SWB (the Second-Stage Results of 2SLS and Lewbel IV)

Dependent Variable: Δ SWB or Change in Subjective Well-Being				
Explanatory Variables	2SLS		Lewbel IV	
	Coeff	SE	Coeff	SE
\hat{T} (Predicted trust in the state government in the first stage)	0.226**	(0.0988)	0.231**	(0.0939)
Age	0.00670***	(0.00243)	0.00670***	(0.00243)
Age Square	-7.80e-05***	(2.50e-05)	-7.80e-05***	(2.50e-05)
Log per capita expenditure	0.0736***	(0.00925)	0.0737***	(0.00925)
Gender				
Female	-0.00496	(0.0290)	-0.00493	(0.0290)
Marital Status				
Unmarried	-0.0632	(0.0496)	-0.0633	(0.0496)
Widowed/Divorced	-0.0271	(0.0267)	-0.0272	(0.0267)
Sector				
Urban	0.0643***	(0.0109)	0.0643***	(0.0109)
Urban Slum	-0.0238	(0.0302)	-0.0238	(0.0302)
Education				
1-4	0.0549***	(0.0181)	0.0548***	(0.0181)
5-8	0.0953***	(0.0142)	0.0953***	(0.0142)
9-10	0.168***	(0.0168)	0.167***	(0.0168)
>10	0.182***	(0.0186)	0.182***	(0.0186)
Religion				

Muslim	0.0774**	(0.0384)	0.0776**	(0.0386)
Christian	0.122***	(0.0330)	0.122***	(0.0330)
Others	0.119***	(0.0292)	0.119***	(0.0292)
Caste				
Brahmin	-0.000681	(0.0223)	-0.000633	(0.0223)
High Caste	-0.000686	(0.0151)	-0.000587	(0.0151)
Dalit	-0.0726***	(0.0148)	-0.0726***	(0.0148)
Adivasi	0.0388*	(0.0208)	0.0388*	(0.0208)
Others	-0.0943**	(0.0368)	-0.0943**	(0.0368)
Log - Net State Domestic Product	0.101***	(0.0186)	0.101***	(0.0185)
Constant	-0.479	(0.217)	-0.485	(0.215)
Observations	29,543		29,543	
Hansen J statistic (over-identification test of all instruments)	: 30.388		99.504	
		Chi-sq(1) P-val = 0.0000		Chi-sq(22) P-val = 0.0020
Robust standard errors in parentheses	*** p<0.01, ** p<0.05, * p<0.1			

Turning to the demographic variables, we find that both age and age squared are significantly associated with Δ SWB. While the change in subjective well-being is positively associated with age, it is negatively associated with age squared. However, the coefficient is negligible. These findings suggest that Δ SWB rises with age but with negligible diminution at an older age. Neither gender nor marital status show significant associations with change in well-being. Location yields significant associations in so far as urban residents display greater well-being, relative to rural residents. This is not surprising as public amenities (e.g., transport, hygiene and sanitation, safe drinking water, public schooling and health care) are much better in urban areas but pollution levels are higher.

As far as schooling grades are concerned, we observe a significant monotonic rising association with Δ SWB. In fact, the marginal effect/association at the primary level (1-4 years) rises from 0.055 to 0.182 at above matriculation level, relative to no schooling. The magnitude is substantial given our measure of change in SWB. The results imply, for instance, that, if the household head schooled at/ above matriculation level (1-4 years of schooling), he or she is 18.2% (5.5%) more likely to perceive a better change in the household well-being, compared with those without any schooling. That there is a threshold effect of level of schooling in the labour market and a concern for social betterment is not unlikely, but could not be ascertained here.

As our measure is confined to the subjective perception of change in economic well-being, it is not surprising that per capita expenditure is positively associated with well-being. A 1 % higher per capita expenditure is associated with a 7.4 % higher probability of moving up the

subjective well-being ladder. This is expected as the focus of our measure is on change in economic well-being. So affluence translates itself into substantially higher well-being. State affluence too is associated with a substantially higher increase in the probability of moving up the ladder of well-being. If state affluence is inclusive and associated with more rewarding employment opportunities, better schooling for children and health care for the residents, it is plausible that the probability of moving up the well-being ladder rises by 10 % in response to a 1 % higher state domestic product per capita.

(ii) Lewbel IV

The Lewbel IV model, in addition to the two external instruments for 2SLS, utilises internally generated instruments based on heteroscedasticity in the error term.¹⁵ The results are given in column 3 of Tables 2 and 3.

It is interesting that there is a statistically significant and negative relationship between trust in the state government and the two external instruments: whether the winning MLA belonged to the ruling party and whether the margin of victory exceeded 12 %. The coefficients are similar to those obtained with 2SLS as shown in the first two rows of Table 2. There are 22 internally specified variables used in the first stage of the Lewbel IV not presented in Table 2¹⁶ and many of these variables are statistically significant in the first stage of the Lewbel IV. The F-statistic (1218.60) is well above the Stock-Yogo critical value of 11.41, implying that the instruments are jointly strong (see the bottom of Table 2). This implies that the maximum relative bias of the Lewbel estimates (compared with OLS) is less than 10%, leading us to conclude that there is no weak instrument problem (Stock and Yogo, 2005). However, the Hansen J statistic (Chi-square (22) = 99.50) is statistically significant as shown at the bottom of Table 3. This casts some doubt about the exogeneity of the instruments as discussed earlier and we will avoid making causal inferences.

Because most of the other covariates in the first stage of Lewbel IV show the same pattern of the estimates as in 2SLS in Table 2, we mainly highlight a few differences. Among the demographic variables, compared with the 2SLS results in which neither age nor its square was significant, the latter is significant with a negligible value. As in the 2SLS results, neither

¹⁵ We have estimated the Lewbel model only with the internally-generated instruments, but have not found a statistically significant coefficient estimate of trust in state governments in the second stage, although the instruments are statistically significant in the first stage. The results will be provided on request.

¹⁶ These variables are computed as $(X_i - \bar{X}_i)\hat{\varepsilon}_{2i}$ where X_i is a vector of exogenous variables, \bar{X}_i is the mean of X_i , $\hat{\varepsilon}_{2i}$ is a vector of the estimated error terms based on Equation (2).

gender nor marital status is significant. Location, however, is associated with significant differences in confidence/trust in state governments. Relative to rural households, those living in urban areas (net of slums) and slums display higher trust in state governments. The coefficients are similar to those obtained with 2SLS. Schooling grades show significant positive associations with trust in state governments. Again, schooling grades are positively associated with the probability of the household head trusting the state government, with non-linearity as the schooling grades rise. Those with minimal schooling (1-4 years) are most likely to trust the state government (i.e., 1.3% more likely than those without schooling as a reference group). The probability of trusting the state government increases marginally as schooling grades rise (+0.86% for 5-8 years, +0.92% for 9-10 years, and +0.925% for >10 years in terms of the probability of trusting the state government in comparison with those without schooling). The differences are, however, small.

Among the socio-economic variables, religion and caste are salient. The results are largely similar to those obtained with the 2SLS except that the coefficient of 'Others' is larger. As before, Muslims display a negative association while Christians show a positive association with trust in state governments. Not only the signs but also the absolute magnitudes are similar to those in 2SLS.

The caste-wise results are mostly similar to those obtained with the 2SLS. An important point to note is that both upper castes and Dalits/SCs show significant negative associations while 'Others' is most likely to trust the state government as it is the only group showing a positive association with trust/confidence in state governments where the reference group is OBCs. One difference is that the coefficient on Brahmins is slightly larger than in the 2SLS (in absolute value). If the household head belongs to Brahmins, he or she is 1.1% less likely to trust the state government than those in OBCs. As before, we found that the household head in High Castes shows the largest negative coefficient estimate (-1.5%), implying that he or she is least likely to trust the state government. However, the absolute magnitudes of coefficient estimates are relatively small and we avoid making strong inferences.

As in the 2SLS, both measures of affluence- at the household and state levels- show significant negative associations with trust in state governments. A 1 % increase in per capita expenditure is associated with a 0.4 % reduction in the probability of trust in state government (lower than in the 2SLS in absolute value). However, a 1% increase in state

domestic product per capita is associated with a much larger reduction in the probability of trust in state governments (5 % which is identical to that of the 2SLS).

Let us now turn to the relationship between Δ SWB and (predicted) trust in state government and other covariates (column 3 of Table 3). There is a statistically significant and positive relationship between these two variables, and the coefficient on trust is similar to that obtained from the 2SLS. A unit increase in the (predicted) trust in state governments (\hat{T}) is associated with an increase in the probability of moving up the ladder of well-being by 23.1%. This indicates a substantial increase in the probability of perceiving a positive change in well-being in economic aspects.

On the results of demographic explanatory variables, while age is positively related to change in well-being, the coefficient on age squared while significant is negligible. These are almost identical to the 2SLS coefficients. An inference, therefore, is that change in well-being rises with age but the diminution at old age is negligible. Neither gender nor marital status possess significant coefficients.

As before, location shows a significant association. Relative to rural residents, urban residents display a higher perceived change in their well-being. The coefficients are identical in both estimations. Schooling grades are positively associated with change in subjective well-being. The monotonic rise in the coefficient estimates on schooling grades replicates the 2SLS pattern with almost identical signs and absolute values. Hence, the inference drawn for 2SLS earlier is valid here.

Among socio-economic variables, we consider religion and caste. It is indeed striking that, relative to Hindus, all religions display higher well-being. This is particularly surprising in the case of Muslims who bear the brunt of discrimination and hostility from the hard-core Hindus. What is also notable is the replication of 2SLS results and so our previous interpretation of the signs and magnitudes of marginal effects of coefficient estimates is valid here.

As far as castes are concerned, there is a notable difference between lower castes: while Dalits/SCs manifest a negative association, Adivasis/STs show a positive association with change in subjective well-being. Another notable contrast is that 'Others' who are akin to upper castes show a significant negative association. This is somewhat intriguing unless they resent not being able to catch up with upper castes economically and in relation to their own

aspirations. Notably, these results replicate the 2SLS results and we avoid repeating the coefficient estimates here.

Affluence at the household level increases the probability of moving up the ladder of well-being – a 1 % increase in per capita expenditure is associated with a 7.4 % increase in the probability of moving up. Affluence at the state level is also associated with a substantial increase in the probability of moving up the ladder- a 1 % increase in state domestic product per capita is associated with a more than 10 % higher probability of moving up. Notably, the 2SLS results are replicated with almost identical coefficients.

In sum, the fact that, in most cases, the 2SLS and Lewbel results are similar, if not identical, suggests that our analyses are robust to the choice of different specifications. However, the fact that in both specifications, the exogeneity condition failed does not allow us to draw causal inferences. Another limitation of our analysis is that, since the explanatory variables relate to 2005 and the outcomes to 2012, we are unable to incorporate fixed/random effects. These could change the results as our dependent variable, change in subjective well-being, is likely to be influenced by how an individual adapts his/her aspirations to a given context and peers. An ambitious individual, for example, would be more resentful and frustrated if a member of the peer group accomplishes greater professional success.

6. Discussion

Instead of summarising the main findings, we will discuss selected findings from a broad policy perspective.

Here an attempt is made to focus on policy implications of our results, which sets the stage for prospects of policy reforms in the following Section. Even though the econometric analysis overlaps with a phase of the previous UPA regime, the policy implications are more relevant in the current NDA regime which has robbed states of their autonomy through excess centralisation and an inflexible and violent form of Hindu nationalism, Hindutva, that has destroyed social and religious harmony. Hence, brief comments on the policy flavour of our findings are appropriate. In doing so, however, we stick closely to our findings.

Let us first consider the insights from the first stage regressions of trust in state governments. The relevance of the instruments in state elections-whether winning candidates belonged to the ruling party and high margins of victory-are indicative of the dominance of a few national and regional parties and rising levels of corruption and criminality among them (Kulkarni et

al. 2022). A competitive and transparent party system at the state level may help weed out corruption and criminality in state assembly elections.

Trust in state government is higher in urban areas and slums, relative to rural areas, presumably because of a continuing urban bias in the provision of public goods and services. Not just the reallocation of public funding to rural areas but also larger amounts for rural development will moderate rural-urban migration and prevent further congestion and overcrowding with an improvement in access to better public amenities. This is not to suggest that urban renewal is unimportant. Quite the contrary. Much needs to be done to decrease congestion, improve public health provision, relocation of households trapped in sub-human conditions, and reduce pollution. Thus, urban development remains a daunting challenge in itself.

We have observed a positive association between schooling grades and trust in state governments with some non-linearity. *Despite* better awareness of state government policy failures, those with more schooling show higher levels of confidence. This evidence suggests that the belief in state governments' capacity for social and economic transformation more than offsets the scepticism born of policy failures. However, it is imperative to not just expand school education - especially in rural areas - but also improve its quality.

That there is a trust deficit among Muslims, relative to Hindus, is a stark reminder of the discrimination that they face in social and economic spheres *despite* UPA's secular credentials. Indeed, the persistence of hostility betrays deep-seated prejudices against Muslims that government policies find difficult to remove. Others-a residual group of religious sects- is more neglected than discriminated against while Christians are better protected against Hindu prejudices. How attitudes and behaviour could be moulded for religious harmony is bound to be a slow and uncertain process.

Except for Others, relative to OBCs, we find that both upper and lower castes (Dalits) display negative associations with trust/confidence in state governments. While upper castes resent catching up of Dalits through affirmative action, the latter resent their failure to mainstream. Hence their associations with trust in state governments seem mutually reinforcing. While aspirations are tied to preferences and are contextual, more inclusive growth could impart a greater sense of accomplishment among diverse castes-especially lower castes.

Finally, the negative associations of affluence at both household and state levels are intriguing. There could be more than one explanation. But the one offered earlier bears repeating. If the affluent bear a greater burden of taxation and the revenue is used for ineffective safety nets (eg, corruption in the mid-day meal scheme and in NREGA/renamed later as MGNREGA) and in law enforcement agencies, these could be grounds for lower trust in state governments. Besides, if the more affluent states underperform in the implementation of social safety nets and in maintaining the rule of law, lower trust outcomes are not unlikely. Whether better monitoring and prompt remedial action would make a difference is plausible.

Let us now review our findings on the covariates of changes in subjective well-being. A key association is between this measure of well-being and (predicted) trust in state governments. Both specifications establish a statistically significant and positive relationship between them. During the UPA regime, trust in state governments was low but rose between 2005 and 2012. Hence the case for building trust in state governments is vital for the associated increase in the probability of greater well-being.

Urban development is a priority in ensuring greater well-being. However, as noted earlier, both rural and urban development have to go together since the betterment of rural areas has strong spillover effects on urban development through reduction of (uncontrolled) rural-urban migration in search of more rewarding employment opportunities and concomitant congestion and pollution.

Schooling grades show robust positive associations with changes in subjective well-being. The higher the grades of schooling, the stronger is the association. Schooling reforms require not just corrections in teacher absenteeism, high school drop-out rates, and poor vocational skills, among others, but also substantial upgrading of school infrastructure (eg, easy access to computers, adequate class-room facilities, separate toilets for girls).

What is indeed heartening is that despite discrimination against minorities-especially Muslims-they are associated with higher probabilities of well-being, relative to Hindus. That this reflects their perceived security under the UPA is more than likely. Religious harmony has, however, been largely destroyed under the NDA by the relentless pursuit of Hindutva and over-centralisation with state governments toeing the Union government diktat. Worse, there is collusion between state governments, lower judiciary, and local police in carrying out these agendas. Whether religious harmony is irretrievably destroyed is of course debatable.

The caste associations are mixed with a striking contrast between Dalits and Adivasis-the former display a strong negative association while the latter record a positive association with change in subjective well-being. As these are the lowest rungs in the caste hierarchy, the contrast is presumably a manifestation of the Dalits' failure to mainstream and the latter's spatial and social isolation. Others are a residual group that is akin to upper castes but not quite in their accomplishments. Hence their negative association with change in well-being is not surprising.

7. Concluding Observations

As emphasised earlier, although our analysis is confined to a phase of the UPA regime, it has strong policy implications for the present NDA regime during which there has been excessive centralisation and a relentless pursuit of Hindutva in which BJP –ruled state governments have been a willing ally¹⁷. The state governments, lower judiciary and the police have been not just silent observers but have been instrumental in crimes against minorities –especially Muslims and lower caste Hindus. Hence it is highly probable that there has been substantial erosion of trust in these public institutions-especially the state governments. So in order to assess the relevance and feasibility of addressing policy concerns, it is necessary to highlight the constraints and impediments to policy reforms that would enable large segments of the Indian population to live dignified and fulfilling lives.

What has further contributed to the erosion of trust in these institutions is their frequent use of security, defamation, sedition, and hate speech laws, as well as contempt-of-court charges to muzzle the media. Contrariwise, revelations of collusion between politicians, business magnates, and lobbyists, on one hand, and leading media personalities and owners of media outlets, as a survival strategy, on the other, have undermined public confidence in the press (Freedom House, 2021).

Secularism was dealt a body blow by the Constitutional Amendment Act (CAA), together with the proposed National Register of Citizens (NRC), as it risks disenfranchising Muslims

¹⁷ Aiyar and Tillin (2020) have drawn attention to the heavy reliance on constitutional authorities such as governors to impose New Delhi's diktat and encroach on state autonomy. The number of states in which the BJP rules or shares power rose from 8 in 2014 to 20 in four years of Prime Minister Modi's leadership to emerge as the strongest force in the country. However, in 2016, obliging governors of the states of Uttarakhand and Arunachal Pradesh – which were ruled by parties that were in opposition at the Centre – reported that the constitutional machinery in these states had broken down, leading to the federal government dismissing the state governments and assuming direct rule. In both cases, the Supreme Court intervened to restore the dismissed governments (Khaitan 2020).

across the country. It provides a pathway to citizenship for non-Muslims but has no remedies for Muslims caught up in NRC processes. There were violent clashes between the protesters and the police. In February 2020, more than 50 people were killed in Delhi; there were reports of indiscriminate attacks against Muslims and police officers failing to respond, as well as some attacks against the police and Hindu residents¹⁸.

The Constitution guarantees all individuals with equal rights, but unfortunately, a vast majority of our citizens are not able to enjoy the rights effectively due to a lack of ability to enforce them. From the citizen's perspective, the enforcement of legal rights is done through the judicial processes, but the court procedures are very complex, costly and tardy, putting the poor people at an extreme disadvantage (Ghosh, 2017, Apoorvanand, 2021, Kulkarni et al. 2022b)¹⁹

Restoration of trust in public institutions is daunting—specifically when it is systemic. As our discussion shows, extreme centralisation of power in the Centre and blatant violation of democratic values have had disastrous consequences in terms of violent clashes, loss of lives, religious discord, assaults on academic freedom, suppression and manipulation of mass media. Exercise of extra-constitutional authority by the Central and state governments, weakening of accountability mechanisms, widespread corruption in the lower judiciary and the police, with likely collusion between them, the perverted beliefs of the latter towards Muslims, other minorities and lower-caste Hindus, a proclivity to deliver instant justice, extra-judicial killings, filing FIRs against innocent victims of mob lynching - specifically, Muslim cattle traders - while the perpetrators of violence are allowed to get away have left scars on the national psyche that may take years to heal. More competitive Central and state governments with strong and credible opposition are key to the restoration of a more democratic environment and for trust to grow. Whether elections can deliver these results is anybody's guess. Freedom of the press or, more broadly, of the mass media has a potentially important role. But whether these can be unshackled from the clutches of an oppressive regime seems unlikely.

¹⁸ The Uttar Pradesh police has arrested over 1,200 people and detained at least 5,500 people in connection with the NRC-CAA related violence (*Firstpost* 15 March 2020, <https://www.indiatoday.in/india/story/anti-cao-violence-with-more-arrests-number-people-apprehended-muzaffarnagar-reaches-85-1635554-2020-01-10>, accessed on 30 April 2022).

¹⁹ In 2018, as the “love jihad” rhetoric became part of the mainstream political discourse, the National Investigation Agency (NIA) conducted an inquiry into interfaith marriages in Kerala. The investigation, as expected, found no evidence of coercion in any of the cases examined. A similar investigation that was conducted in September 2020 in Kanpur, Uttar Pradesh, reached the same conclusion (Apoorvanand 2021)

In conclusion, the prospects of reforms in the functioning of state governments are daunting when they are at the mercy of a highly centralised Union government which tramples individual rights and freedom of speech with impunity. A competitive federal structure that serves the people better is highly desirable but in the present context highly unlikely.

References

- Aiyyar, Y. and L. Tillin (2020): “[One Nation BJP and the Future of Federalism](#)”, *India Review*, Vol 19, No 2, pp 117-135.
- Akay, A. O. B. Bargain, and H. X. Jara (2017) “Back to Bentham, Should We? Large-Scale Comparison of Experienced versus Decision Utility”, IZA DP No. 10907, Bonn.
- Angrist, J. D., and J. S. Pischke (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press, Princeton, NJ.
- Apoorvanand. (2021): “India's 'love jihad' laws: Another attempt to subjugate Muslims”. January 15. *AL Jazeera*.
- Bauer, P. and M. Fretag (2017) “Measuring Trust”, Ed. E. M. Uslaner, [The Oxford Handbook of Social and Political Trust](#), New York and Oxford.
- [Baum](#), C.F. and A. Lewbel (2019) “Advice on using heteroscedasticity-based identification”, *The Stata Journal: Promoting communications on statistics and Stata*, December 18, <https://doi.org/10.1177/1536867X19893614>
- Blanchflower, D. G., and Oswald, A. J. (2004). “Well-being over time in Britain and the USA”. *Journal of Public Economics*, 88, 1359–1386.
- Blanchflower, D.G., and A. Oswald (2007) “Is Well-Being U-Shaped Over The Life Cycle?”, NBER Working Paper Series, Working Paper 12935, Cambridge, MA.
- Brillantes, A.B. and M.T.F.T. Fernandez (2011) “Restoring Trust and Building Integrity in Government: Issues and Concerns in the Philippines and Areas for Reform”. *International Public Management Review*, 12, 55-80.
- Clark, A. (2003). “Unemployment as a social norm: Psychological evidence from panel data”. *Journal of Labor Economics*, 21(2), 323–351.
- Clark, A., Frijters, P., and Shields, M. A. (2008). “A survey of the income happiness gradient”. *Journal of Economic Literature*.
- Cantril, H (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Chemin, M. (2010) “Does Court Speed Shape Economic Activity? Evidence from a Court Reform in India”, *Journal of Law, Economics, and Organization* Advance Access published November 11
- Dalton, R.J. (2005), “The social transformation of Trust in Government”, *International Review of Sociology*
- Deaton, A. (2011) “Aging, Religion, and Health”, D. A. Wise (ed.) *Explorations in the Economics of Aging*, University of Chicago Press.
- Deaton, A. (2018) “What do self-reports of well-being say about life-cycle theory and policy?”, *Journal of Public Economics*, 162, 18-25.
- Deshpande, R., K.K. Kailash & L. Tillin (2017): “States as laboratories: The politics of social welfare policies in India”, *India Review*, Vol 16, 2017.

- Diener, E. R. Inglehart, L. T. (2013)“Theory and Validity of Life Satisfaction Scales”, *Soc Indic Res*, 112:497–527.
- Dolan, P., T. Peasgood, and M. White (2008) “Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being”. *Journal of Economic Psychology* 29, 94–122.
- Duesenberry, J.S. (1949) *Income, Saving, and the Theory of Consumer Behavior*. Harvard University Press, Cambridge.
- Easterlin, R. A. (1973). “Does Money Buy Happiness?” *The Public Interest*; New York Vol. 30,
- Easterlin, R. A. (2006). “Life cycle happiness and its sources: Intersections of psychology, economics, and demography”, *Journal of Economic Psychology*, 27(4), 463-482.
- Gissur Ó. Erlingsson, J. Linde & R. Öhrvall (2014) “Not so Fair after All? Perceptions of Procedural Fairness and Satisfaction with Democracy in the Nordic Welfare States”, *International Journal of Public Administration*, 37:2, 106-119, DOI: [10.1080/01900692.2013.836667](https://doi.org/10.1080/01900692.2013.836667).
- Fehr, E. (2009). “On the economics and biology of trust”, *Journal of the European Economic Association*, 7(2-3), 235-266.
- Fontaine, X. & K. Yamada (2014) “Caste Comparisons in India: Evidence From Subjective Well-Being Data”, *World Development*, vol. 64, issue C, 407-419.
- Freedom House (2021) *Freedom in the World 2021: Democracy under Siege*.
- Ghosh, Y. (2017): “Indian Judiciary: An Analysis of the Cyclic Syndrome of Delay, Arrears and Pendency”. *Asian Journal of Legal Education*, Vol5, No 1, pp 21-39.
- Governor, Uttar Pradesh (2020): The Uttar Pradesh Prohibition of Unlawful Religious Conversion Ordinance. Lucknow: UP Ordinance No. 21 of 2020.
- Hansen, B.E., 2021. Econometrics. Revised version: <https://www.ssc.wisc.edu/~bhansen/econometrics/> (accessed on 28 April 2022).
- Hardin, R. (2000) *Trust and Trustworthiness*, Russell Sage Foundation, New York.
- Kahneman, D., and A. B. Krueger (2006) “Developments in the Measurement of Subjective Well-Being”, *Journal of Economic Perspectives—Volume 20, Number 1—Winter—3-2*.
- Kahneman, D., and A. Deaton (2010) “High income improves evaluation of life but not emotional well-being”, *PNAS*, September 21, vol. 107, no. , pp. 16489–16493.
- Khaitan, T. (2020): “Killing a Constitution with a Thousand Cuts: Executive Aggrandizement and Party-state Fusion in India”.*Law & Ethics of Human Rights*, Vol 14, No 1, 49-95.
- Kulkarni, Vani, S. Veena S. Kulkarni, K. Imai, and R. Gaiha. (2021). "Changes in Subjective versus Objective Well-Being in India." University of Pennsylvania Population Centre Working Paper PSC/PARC), 2021-71. https://repository.upenn.edu/psc_publications/71.
- Kulkarni, Vani,S., Veena S. Kulkarni, K. Imai, and R.Gaiha. (2022a) "Change in Subjective Well-Being, Affluence and Trust in Politicians." *University of Pennsylvania Population*

Center Working Paper (PSC/PARC), 2022-87. https://repository.upenn.edu/psc_publications/87.

Kulkarni, Vani, S., Veena S. Kulkarni, K. Imai, and R. Gaiha. (2022b) “Change in Subjective Well-Being, Affluence and Trust in Judiciary”, *University of Pennsylvania Population Center Working Paper (PSC/PARC)*, 2022-90. https://repository.upenn.edu/psc_publications/90.

Kumar, D., Pratap, B., & A. Agarwal, (2020) “Public trust in state governments in India: Who are more confident and what makes them confident about the government?”, *Asian Journal of Comparative Politics*.

Levi, M. (1997) *Consent, Dissent, and Patriotism*, Cambridge University Press.

Lewbel, A. (2012) “Using Heteroscedasticity to Identify and Estimate Mismeasured and Endogenous Regressor Models”, *Journal of Business & Economic Statistics* Volume 30, Issue 1.

[Marien, S., & M., Hooghe](#) (2011) “Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance”, *European Journal of Political Research*, [Volume50, Issue2](#).

Muller, E., & Thomas Jukam. 1977. “On the Meaning of Political Support”, 71: 1561-95.

NCAER & University of Maryland (2015) India Human Development Survey, <https://doi.org/10.3886/ICPSR22626.v12> and <https://doi.org/10.3886/ICPSR36151.v6>.

Ravallion, M. (2014) “Poor, or Just Feeling Poor? On Using Subjective Data in Measuring Poverty”, In *Happiness and Economic Growth*, A. Clark and C. Senik (eds.) Oxford: Oxford University Press.

Ravallion, M., K. Himelein and K. Beegle (2016) “Can Subjective Questions on Economic Welfare Be Trusted?”, *Economic Development and Cultural Change*, volume 64, no. 4.

Stock, J. H. & M.W. Watson (2018) *Introduction to Econometrics*, Pearson.

Stock, J. H. and M. Yogo (2005): “Testing for Weak Instruments in Linear IV Regression,” in *Identification and Inference for Econometric Models: A Festschrift in Honour of Thomas J. Rothenberg*, D. W. K. Andrews and J. H. Stock (eds.). Cambridge, UK: Cambridge University Press.