

Persuasion is now 30 per cent of US GDP

Revisiting McCloskey and Klammer after a quarter of a century

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Persuasion is the common thread in almost all voluntary transactions. Sellers persuade buyers, politicians persuade voters and lobbyists persuade politicians. And non-government organisations are increasingly persuasive in policy deliberations. With persuasion's footprint in the modern economy substantial and growing, this paper briefly scans the recent literature and suggests the McCloskey-Klammer estimate of the persuasion content of GDP could now be higher.

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The discovery is not true

If true, it is not new

If both new and true, it is not significant.

— Robert King Merton (1967) *On Theoretical Sociology, Five Essays, Old and New* Chapter I (p. 21), The Free Press

Over fifteen years ago Deidre McCloskey and Arjo Klamer (1995) gave us a striking guesstimate that the persuasion content of United States economic activity could be as high as one quarter. They made explicit what was known implicitly: that persuasion is important for economic transactions and relationships. Such ‘sweet talk’ conveys more than mere information, instructions for compliance with regulations or prescriptive orders. Considering rapid technological advances, including social media, it is reasonable to ask whether the McCloskey-Klamer guesstimate is still hard currency. An allied interest is how the persuasion literature has developed.

A brief scan of the persuasion literature

It might be a stretch to talk of a persuasion literature since it does not have a recognisable domain or a distinct methodology. A range of recent papers seeks to influence our understanding of the economic dimension of persuasion.

Skaperdas and Vaidya (2009) notice that much social and economic activity concerns attempts to persuade in an adversarial fashion particularly in political campaigning, advertising,² litigation and lobbying. Consequent escalation of resources employed (that is more consultants, lawyers, economists) does not necessarily improve adversaries’ likelihood of successful persuading. For example, lobbying campaigns with differing levels of expenditure can have similar probabilities of success.

Less obvious but perhaps no less significant are policy debates and lobbying within and among countries, among think tanks and world institutions.³ The United Nations, the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD) are institutional persuaders and are themselves the object of strong persuasion. Giles (2011) writes that the IMF’s failure to spot the UK’s vulnerability to financial crises owed much to its constant sparring with Gordon Brown’s Treasury over the UK’s public finances and that fund staff ‘were influenced by the authorities’ own analysis and strong reputation’. Giles goes on to report that contemporary briefings from unidentified IMF and OECD officials indicate that the UK was among the most adept countries at modifying reports from international organisations.

Using a behavioural model, Mullainathan and Shleifer (2005) investigate whether persuasion is mainly about providing information or tailoring a message to an audience’s pre-existing beliefs. By

2 The Nielsen organisation puts 2011 global advertising spending at \$US 498 billion (see <http://www.nielsen.com/us/en/newswire/2012/2011-closed-with-7-3-percent-increase-in-global-advertising-spend.html>).

3 Taxation reform and climate change policy entail large ‘persuasion contests’ involving sophisticated scientific, social and economic talk.

investigating financial advertisements in *Business Week* during the dotcom bubble they conclude that persuasion by financial firms was geared towards telling people what they wanted to hear. Specifically, 'advertisers tapped into the growth system of beliefs when stock prices were rising, and into the protection system when prices were falling'. Consequently, they question whether financial advisers stabilise asset price bubbles and whether by playing to prevailing investor pre-dispositions⁴ they end up encouraging speculation.

Milgrom (2008) reviews a class of problems where the seller of goods or services has an incentive to selectively disclose information to the buyer. In such 'persuasion games' one or more sellers provide verifiable information to persuade potential buyers. His analysis indicates sophisticated buyers are consistently sceptical. When a key piece of information is missing, those buyers interpret its absence as intent to dupe and therefore reduce their purchases accordingly.⁵ Regulation that especially punishes sellers for withholding material information can help to limit nondisclosure or at least moderate selective disclosure. Such regulation works when buyers are rank novices in comparing product characteristics and are not too heterogeneous. But regulation tends to be less effective when buyers demand diverse product information, thus making mandatory disclosure too costly and unworkable.

Murphy and Shleifer (2004) develop a model of social networks. Examples include discourse within political parties, social action groups, trade unions, religious coalitions, talk-back radio, and social media. The key idea is that people are more readily persuaded from within their network and are less likely to be persuaded by those outside their network. The resulting 'group think' crowds out contrary analysis, particularly if offered initially by those deemed as outsiders. In this context the 'outsiders' can even be senior people within an organisation.

Debates within organisations, including not-for-profit entities, surface only when intensity and rivalry become severe. In reviewing the IMF's reluctance to recognise mounting systemic risk that led to the Global Financial Crisis, in spite of public warnings from its chief economist Raghuram Rajan, the IMF's Independent Evaluation Office reports:

The evaluation team was given several alternative explanations for the lack of traction of Rajan's views. The most common explanation was that his concerns were considered as only having a low probability, mainly because most staff saw financial markets as inherently stable. Some thought that 'turf' played an important role, that is, others in the IMF objected to Rajan taking a lead on financial sector issues. In any case, the fact that concerns repeatedly raised by the IMF Economic Counsellor failed to influence the IMF work program and the flagship documents indicated a lack of clarity on whose responsibility it was to follow up on these issues (IMF (2011) p. 10).

Reliance on inherently stable financial markets suggests confirmation bias among IMF staff and the allusion to 'turf' indicates social network exclusivity. In a lucid critique of the IMF's performance in this epoch, Wolf (2011) observes this 'queen of international economic organizations' has 'only the

4 These pre-dispositions are 'confirmation biases' of different kinds where the receiver selectively registers information consistent with their own beliefs. But here the seller is exploiting these cognitive biases to present information likely to find favour with the buyer of the financial product.

5 In the Great Recession and the rolling Eurozone crises as share prices continued their downward drift, investors ignored 'buy advice' from brokers even though share price multiples to earnings were highly favourable. Whereas other advice to 'sit on cash' was eagerly received and acted upon.

powers of analysis, persuasion, and ruthless truth-telling' and encourages it to use these powers often and consistently.

Sunstein's (2009) highly engaging book probes the realm of polarisation and extremism which reduces diversity within a group and accentuates rifts among groups. His study of different social phenomena leads to the unifying theme: '(w)hen people find themselves in groups of like-minded types, they are especially likely to move to extremes' (p. 2). Furthermore, '(w)e see this happen in politics; it happens in families, businesses, churches and synagogues, and student organizations as well' (p. 8).

Evidently, policy development and implementation is vulnerable to network-based 'persuasion cascades'. Banks' (2009) reflection advances the case for more and better evidence-based policy making and transparency in policy analysis. 'Given unavoidable need for judgement in evaluation, evidence is more likely to be robust and seen to be so if it is not subjected to influence or barrow-pushing by those involved' (p. 17).

There may also be a need to safeguard institutional credibility by exposing policy development and implementation processes to ex post peer reviews preferably by credible external authorities. Developing a viable 'challenge function' within organisations could assist ex ante policy evaluation. A report prepared by Wales and Wales (2012) for a recent Oxford University conference on tax policy-making in developed countries found 'there is a lack of challenge to emerging policy ideas in some, if not most, countries that weakens policy development'.

McCloskey and Klammer (1995) called for economics to acknowledge the role of persuasion but formal modelling does not impress McCloskey (2011):

In explaining the fact of 25 per cent of national income being sweet talk a temptation of the modern economist is to try to model it in the style of Samuelson, as the outcome of still another adventure of the prudent person, Mute Max U. (I say 'Mute' because we are talking about talking here, and Samuelsonian economics does not talk about it.) The modern Samuelsonian economist does so because it is her only model. If something – love or justice or courage – does not fall within a utilitarian maximization subject to a resource constraint, she has nothing to say. But language, I am suggesting, unless reduced to bits of information put through conduits between minds, as it cannot entirely be so reduced, cannot be modelled as Mute Max U (p. 55).

To put it another way, the Mute Max U model fits smoothly with the metaphor of speech as a conduit, which would be good news if human communication were largely a matter of transmitting preformed messages between minds. But Mute Max U does not fit ... with Austrian economics, when properly extended to the persuasive role of the entrepreneur (p. 60).

Updating McCloskey and Klammer

I turn now to this paper's main aim: to update the McCloskey-Klammer estimate of the size of persuasion in market transactions. Table 1 reproduces their calculation.

Table 1: McCloskey and Klammer's Persuasion Estimate

	Weight	1993	1993	1993
		Employment (million)	Persuasion Employment (million)	(million)
Lawyers and judges	1	0.82	0.82	
Public relations specialists	1	0.16	0.16	
Actors and directors	1	0.10	0.10	
Social, recreational and religious workers	1	1.10	1.10	2.16
Counsellors, educational and vocational	0.75	0.22	0.17	
Editors and reporters	0.75	0.27	0.20	
Supervisors - Administrative support, including clerical	0.75	0.78	0.58	
Supervisors - Construction trades	0.75	0.73	0.55	
Supervisors - Protective service	0.75	0.19	0.14	
Supervisors - Mechanics and repairers	0.75	0.22	0.17	
Teachers and Professors	0.75	5.17	3.88	
Sales occupations, excluding cashiers	0.75	11.66	8.75	
Executive, administrative and managerial	0.75	15.38	11.53	25.96
Police and detectives	0.5	0.92	0.46	
Adjusters and investigators	0.5	1.37	0.69	
Teachers' aides	0.5	0.51	0.25	
Authors; Technical writers	0.5	0.20	0.10	
Social scientists and urban planners	0.5	0.40	0.20	
Health assessment and treating occupations	0.5	2.60	1.30	3.00
Natural scientists	0.25	0.53	0.13	
Legal assistants	0.25	0.25	0.06	0.20
Persuasion Workers				31.33
Total US person-years worked		43.57		119.31
Persuasion as per cent of total				26.26%

Source: US Bureau of Census 1994, Statistical Abstract of the United States, Table 637: Employed Civilians by Occupation, Sex, Race and Hispanic Origin.

McCloskey and Klammer claim that the work of lawyers and judges is wholly about persuading others, whereas persuasion by legal assistants might be as low as 25 per cent. Teachers and professors are thought to spend three-quarters of their time in persuading activities whereas teaching aides only persuade 50 per cent. As Table 1 makes explicit, employment groups that are thought to spend three-quarters of their time in persuasion activities pretty much determine the McCloskey-Klammer estimate.

Using the same weights as McCloskey and Klammer, I estimate that by 2003 the proportion of persuasion in the US employment had risen to 29 per cent as shown in Table 2.

Table 2: Persuasion jumps to approximately 29 per cent of employment by 2003

		2003	2003	2003
	Weight	Employment (million)	Persuasion Employment (million)	(million)
Lawyers	1	1.01	1.011	
Public relations specialists	1	0.13	0.128	
Artists; Musicians and singers; Producers and directors	1	2.10	2.102	
Social, recreation, and religious workers	1	1.54	1.544	4.79
Counsellors	0.75	0.64	0.480	
Editors; News analysts, reporters and correspondents	0.75	0.24	0.182	
Supervisors - Office and administrative support occupations	0.75	1.62	1.217	
Supervisors - Buildings and grounds cleaning and maintenance occupations	0.75	0.39	0.292	
Supervisors - Protective service occupations	0.75	0.13	0.095	
Supervisors - Food preparation and serving related occupations	0.75	0.67	0.500	
Supervisors - Personal care and service occupations	0.75	0.29	0.220	
Supervisors - Retail sales workers	0.75	3.39	2.542	
Supervisors - Non-retail sales workers	0.75	1.39	1.041	
Supervisors - Construction and extraction occupations	0.75	0.90	0.673	
Supervisors - Installation, maintenance, and repair occupations	0.75	0.34	0.255	
Supervisors - Production occupations	0.75	0.94	0.704	
Supervisors - Transportation & material-moving operations	0.75	0.22	0.162	
Teachers, excluding Librarians and Teacher assistants	0.75	6.64	4.982	
Sales occupations, excluding First-line supervisors/managers and Cashiers	0.75	8.28	6.210	
Management occupations	0.75	14.47	10.851	30.41
Management analysts; Personal finance advisors	0.5	0.86	0.431	
Detectives and criminal investigators; Police and sheriff's patrol officers	0.5	0.72	0.362	
Claims adjusters, appraisers, examiners and investigators	0.5	0.28	0.142	
Librarians; Teaching assistants	0.5	1.13	0.563	
Writers and authors	0.5	0.19	0.095	
Health practitioner occupations, excluding physicians, surgeons and dentists	0.5	5.64	2.821	4.41
Life, physical, and social science occupations	0.25	1.38	0.344	
Paralegals and legal assistants	0.25	0.50	0.124	
Tax preparers	0.25	0.09	0.023	0.49
Persuasion Workers				40.10
Total US person-years worked		56.12		137.74
Persuasion as per cent of total				29.11%

Source: US Bureau of Census 2004-05, Statistical Abstract of the United States, Table 597: Employed Civilians by Occupation, Sex, Race and Hispanic Origin.

In a decade, persuasion effort in the US grew faster than overall employment. The 2003 census data revamps the employment categories somewhat and expands considerably the range of jobs that have persuasion content. For example, the category, 'Management occupations' did not feature in the earlier data set and I have given it a 75 per cent persuasion content. A category close to my professional interest is the role of 'Tax preparers'; since it shows up in the 2003 census for the first time, I have judged its persuasion content at 25 per cent.⁶ These coverage shifts suggest McCloskey and Klamer's 1993 data is better compared with 1983 data; and 2003 data with 2009 data.

6 I am assuming tax preparers spend the other ¾ of the time advising on how to comply with tax law.

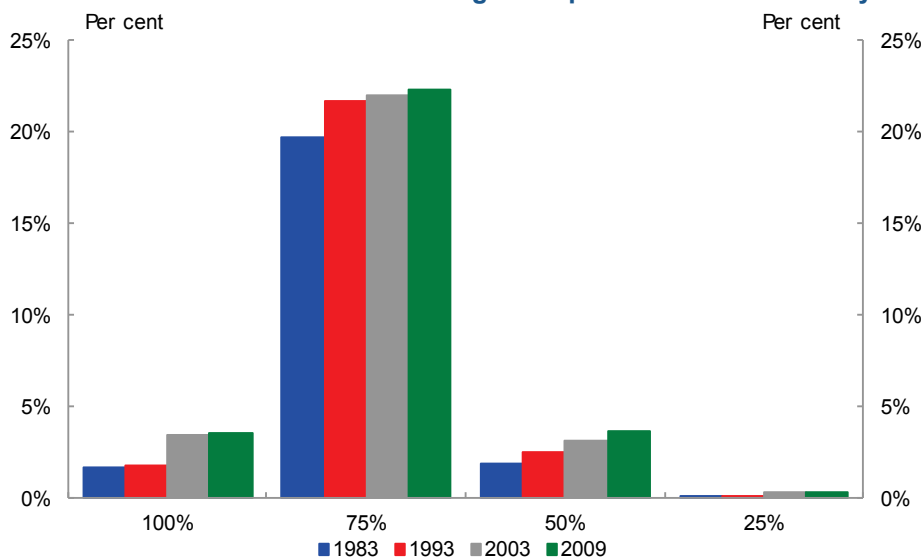
Table 3: By 2009 persuasion workers have settled at approximately 30 per cent

		2009	2009	2009
	Weight	Employment	Persuasion	
		(million)	Employment	(million)
			(million)	
Law yers	1	1.12	1.12	
Public relations specialists	1	0.14	0.14	
Artists; Musicians and singers; Producers and directors	1	2.16	2.16	
Social, recreation, and religious w orkers	1	1.64	1.64	5.06
Counsellors	0.75	0.70	0.52	
Editors; New s analysts, reporters and correspondents	0.75	0.25	0.19	
Supervisors - Office & administrative support occupations	0.75	1.63	1.22	
Supervisors - Building and grounds cleaning and maintenance occupations	0.75	0.54	0.40	
Supervisors - Protective service occupations	0.75	0.10	0.08	
Supervisors - Food preparation and serving related occupations	0.75	0.60	0.45	
Supervisors - Personal care and service occupations	0.75	0.37	0.27	
Supervisors - Retail sales w orkers	0.75	3.31	2.48	
Supervisors - Non retail sales w orkers	0.75	1.29	0.97	
Supervisors - Construction and extraction occupations	0.75	0.74	0.55	
Supervisors - Installation, maintenance, and repair occupations	0.75	0.34	0.26	
Supervisors - Production and operating w orkers	0.75	0.74	0.55	
Supervisors - Transportation and material-moving operations	0.75	0.22	0.17	
Teaching occupations, excluding Librarians and Teacher assistants	0.75	7.42	5.56	
Sales occupations, excluding First-line supervisors/managers and Cashiers	0.75	7.98	5.99	
Management occupations	0.75	15.45	11.59	31.25
Management analysts; Financial analysts; Personal financial advisors	0.5	1.13	0.57	
Detectives and criminal investigators; Police and sheriff's patrol officers	0.5	0.86	0.43	
Claims adjusters, appraisers, examiners, and investigators	0.5	0.28	0.14	
Librarians; Teaching assistants	0.5	1.21	0.61	
Writers and authors	0.5	0.18	0.09	
Health practitioner occupations, excluding physicians, surgeons and dentists	0.5	6.66	3.33	5.16
Life, physical, and social science occupations	0.25	1.33	0.33	
Paralegals and legal assistants; Miscellaneous legal support w orkers	0.25	0.59	0.15	
Tax preparers	0.25	0.10	0.02	0.51
Persuasion Workers				41.97
Total US person-years w orked		59.07		139.88
Persuasion as per cent of total				30.01%

Source: US Bureau of Census 2011, Statistical Abstract of the United States, Table 615: Employed Civilians by Occupation, Sex, Race and Hispanic Origin.

Chart 1 displays the steady rise of persuasion content in US employment. To focus on the biggest grouping – those having a persuasion content of three-quarters – in 1983, they accounted for 19.7 per cent of total employment and grew by two percentage points to 21.8 per cent by 1993. And again, from 22.1 per cent in 2003 the proportion of these workers increased to 22.3 per cent in 2009. Overall persuasion employment appears to have settled at around the 30 per cent mark.

Chart 1: Persuasion cohorts and their growth profile over the last 26 years



Source: US Bureau of Census, Statistical Abstract of the United States (1985, 1994, 2004-05 and 2011), table: Employed Civilians by Occupation, Sex, Race and Hispanic Origin.

Persuasion GDP

How much of national output is attributable to persuasion? McCloskey and Klammer derive an estimate through the production measure of GDP: the ‘more obviously “talkie” parts of production are a large part of production for final consumption, and much of it is persuasion rather than information or command’. And since these ‘talkie’ parts, such as wholesale and retail trade, finance and general government, add up to 58 per cent of US GDP in 1991, they conjecture that ‘it would not be hard to see ... a figure of about a quarter (of GDP) devoted to persuasion’ (p. 193).

An alternative guess could be made from the income side of the national accounts – GDP(I). Since the persuasion content of employment is 30 per cent and the proportion of national income accruing to labour is around 60 per cent in the US (Jacobson and Occhino (2012)), that gives the labour income component of persuasion in the national accounts of around 18 per cent. If a fifth to one-quarter of capital income represents persuasive activity, that accounts for another 8-10 per cent (that is 20-25 per cent x (1-0.6)) of persuasion in GDP(I).⁷ The digital economy’s rapid advance has meant that brand names, commercial trademarks and other intellectual property are playing a bigger role in economic transactions and by their nature may not be well reflected in the national accounts. Therefore it is quite possible that the persuasion content of GDP may now be closer to 30 per cent.

While it is likely that persuasion GDP has risen above one quarter, it also bears entertaining the possibility that some of that effort could be dissipated by economic contests and positioning à la Skaperdas and Vaidya (2009).

Summary

Since the inspired guesstimate of McCloskey and Klammer, the economics profession launched itself into modelling many aspects of persuasion. Insights are to be had for sure, particularly in how regulators might mandate minimum product or service disclosure standards or how persuasion is

⁷ Considerable persuasion is involved in creating, marketing and analysing financial products.

deployed in economic contests. There might even be lessons as to how to communicate difficult economic reform proposals and how to navigate tricky political economy landscapes.

But as McCloskey (2011) suggests, some research effort may be falling back into the trap of treating persuasion as just another factor in formal optimisation exercises. In that sense, McCloskey and Klammer's (1995) original hope remains unrealised. They had hoped that a renewed awareness of the importance of persuasion might encourage the modern economist to augment her technical tools of trade by taking seriously the potential of language in economic discourse and by utilising the power of interpretation in distinguishing between competing 'hard results'. In this way, McCloskey's agenda goes beyond evidence-based policy evaluations, useful and necessary as they are in policy discourse.

On a positive note, might it be time to update the McCloskey-Klammer catch phrase to '30 per cent of GDP is persuasion'? Such renewed speculation would of course merely inform because the persuading was eloquently done by McCloskey and Klammer.

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