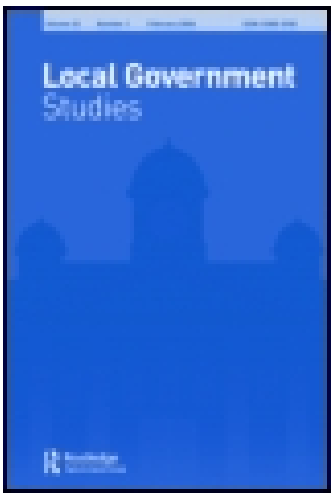
This article was downloaded by: [Universitaire De Lausanne]
On: 11 August 2015, At: 05:48
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954
Registered office: 5 Howick Place, London, SW1P 1WG



Local Government Studies
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/flgs20

Welfare Loss with Municipal Amalgamations and the Willingness-to-Pay for the Municipality Name

Nils Soguel[a] & Julie Silberstein[a]
[a] Institut de hautes études en administration publique (IDHEAP), University of Lausanne, Lausanne, Switzerland
Published online: 10 Jul 2015.

CrossMark
Click for updates

To cite this article: Nils Soguel & Julie Silberstein (2015): Welfare Loss with Municipal Amalgamations and the Willingness-to-Pay for the Municipality Name, Local Government Studies, DOI: 10.1080/03003930.2015.1061507

To link to this article: http://dx.doi.org/10.1080/03003930.2015.1061507

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Local Government Studies, 2015
http://dx.doi.org/10.1080/03003930.2015.1061507

Routledge
Taylor & Francis Group

Welfare Loss with Municipal Amalgamations and the Willingness-to-Pay for the Municipality Name

NILS SOGUEL & JULIE SILBERSTEIN
Institut de hautes études en administration publique (IDHEAP), University of Lausanne, Lausanne, Switzerland

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

ABSTRACT *Functional advantages and drawbacks are commonly mentioned to rationally justify or condemn municipality amalgamations. However, many consolidation projects are resisted by local governments or citizens on the grounds that amalgamation would dampen local identity. A municipality's name change is probably the most visible sign of the loss of community bond experienced by citizens at amalgamation time. This article aims to put a value on this loss by measuring citizen willingness to pay for their city name. This methodological approach innovates upon the literature on municipal amalgamation and place branding by exploiting the versatility of the so-called contingent valuation method (CVM). CVM confronts respondents, in a survey setting, with a hypothetical market in which a characteristic of interest is exchanged. Here the characteristic is the possibility to retain one's city name for an amalgamated jurisdiction. The article presents the estimates provided by a survey conducted in four Swiss cities.*

KEY WORDS: Municipal amalgamation, city name, local identity, place branding, willingness-to-pay, contingent valuation

1. Introduction

Functional advantages and drawbacks are commonly mentioned to rationally justify or condemn amalgamations – or consolidation or merger – of municipalities. Possible efficiency gains, like economies of scale, reduction of geographic spillovers or increasing coordination, are confronted with efficiency losses, like diseconomies of scale, inadequacy of public services in case of heterogeneous preferences (e.g. King and Ma 2000). In reality, many amalgamation projects are resisted by local governments in the case of state-imposed amalgamation (Hanes, Wikström, and Wångmar 2012) or by the population if a referendum takes place. This is precisely what has happened on several occasions in Switzerland where

Correspondence Address: Nils Soguel, IDHEAP, University of Lausanne, CH-1015 Lausanne, Switzerland. E-mail: nils.soguel@unil.ch

© 2015 Taylor & Francis

this kind of project must usually be put to the ballot. One common conjecture for the rejection of such a proposal has less to do with functional, than with psycho-sociological, reasons: any merger would dampen citizen identification with the newly amalgamated municipality compared to the pre-existing municipality (Kushner and Siegel 2005; Jones and Soguel 2010). Indeed, as stated by Steiner (2003), 'when a municipal merger occurs, one or more municipalities cease to exist. The essential trait of a merger is the complete surrendering of independence by one or several municipalities. All municipal tasks are fulfilled by the new municipality' (554).

The most visible sign of identification loss is the jurisdiction's post-amalgamation name change. Indeed the name is the most visible element – together with the armorial bearing – that ties residents to and constructs identification with their communities. According to Delattre (2007), the name is 'the principal vector of identity' and 'represents the organisation as a whole' (270). A municipality's name change following an amalgamation severs this bond, generates a loss of identification and eventually of welfare.

This article contributes to the literature on municipal amalgamation and place branding. It theoretically innovates in the sense that it aims to put a monetary value on the loss of well-being provoked by the post-merger name change. From a policy perspective, knowing the importance of the loss matters. For instance, it should help the higher level of government (for Switzerland this refers to the canton) to offer an adequate financial compensation to the population group whose well-being is affected by the amalgamation. Indeed many Swiss cantons provide financial incentives as a reward for amalgamation in an attempt to reduce the number of municipalities.[1] These incentives help reduce the municipal debt, thus the interest payments and eventually the local citizens' tax burden. However, such incentives have not prevented many consolidation projects from failing when voted upon. An adequate compensation would increase the chance for an amalgamation project to be accepted by voters.

Conceptually, the monetary value of the municipality's name can be measured by the citizens' willingness-to-pay (WTP) to avoid suffering such a loss. Several techniques exist to value the WTP, the most versatile being the contingent valuation method (CVM). This kind of versatility is crucial when dealing with an intangible good like a municipality's name. CVM consists of surveying respondents directly about the value they put on the evaluated good, i.e. their WTP for it. Here the good is the hypothetical (i.e. contingent) possibility of retaining the municipality's name for the amalgamated jurisdiction. CVM has been extensively used in environmental economics and is increasingly applied in other fields. However, it has never yet been applied to value a municipality's name. In this sense, our research also offers a methodological innovation. Our case study looks at two amalgamation projects, each between two Swiss cities. A total of 800 phone interviews were conducted.

Section 2 provides a theoretical background by briefly surveying the literature regarding local identity, place branding and valuation using CVM. The way we

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

designed our survey is described in Section 3, including the empirical setting, the choice of data collection and the contents of the questionnaire.[2] Section 4 presents our main results: the stated WTP and the estimated value of the municipalities' name. The WTPs are further analysed in Section 5 with statistical models in order to highlight the influencing factors. It allows us to assess the internal validity of the WTP with factors derived from microeconomic theory and sociological theories. Section 6 concludes the article.

2. Literature and theoretical background

As stated by Bartolini and Fiorillo (2008), functional federalism perspective does not seem to place sufficient emphasis on 'local identity'. In some countries (France, Italy or Spain), 'local identity is very strong for historical reasons' and 'any form of cooperation imposed by a higher level of government is destined to encounter strong resistance' (53–54). Dollery and Akimov (2009) observe that losing one's 'local identity' is often a significant hurdle to voluntary alliances in local government. For instance, in Australia, the National Office of Local Government (1998) acknowledges that municipal amalgamations potentially introduce a 'dominance of one area over another' and a 'loss of identity' (56).

Human geography and sociology offer positive explanations for understanding the role played by local identity in the municipal amalgamation or break-up phenomenon. For Debarbieux (2006), 'the shared feeling and willingness of several individuals to belong to the same group' (342) is the foundation of collective identity and feeling of belonging. According to Le Bart (1999), the municipality's name, history, town hall, logo or crest are all 'mobilizing myths' (424), 'contemporary totems' (425) that must be recognised in order to establish territorial borders. As Bourdieu (1980) indicates, the population will integrate the municipality's name and oft-repeated slogans and this will contribute to the creation of its collective history.

Marketing literature has investigated how country names are used as trademarks and how they develop as place branding (Kotler and Gertner 2002). Studies dedicated to a city's image and management of city-type 'branding' are more recent (Kavaratzis and Ashworth 2005; Anholt 2006). There is very little research that looks specifically at communal name changes; even if Lynch (1960) did highlight that naming practices could strengthen the identity of an urban space. Delattre (2007) offers the first attempt to document these name changes. All of these marketing-centred studies share an analysis of the way in which the name, the brand, are perceived from outside the municipality concerned.

To the best of our knowledge, only one study – Adam (2008) – looks at the importance of a name within the framework of citizen identification with their municipality, and within an amalgamation perspective. The author focuses on five amalgamations in Quebec in which the name of the community seems to have played a decisive role. By analysing regional news coverage of political

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

debates, he shows that the names retained by the post-fusion communities most often make a reference 'to an entity of the physical surroundings' (278). From this she deducts a desire or a tendency to reconcile the individual with a place, with nature.

Following Stiglitz's definition (1983), identification with a community through the municipal name can be seen as a local public good. It is a pure public good 'within' the community with both defining characteristics of being non-rival and non-exclusive. It is thus subject to a market failure: no market exists that would directly indicate its price and thus how much the identification through name is worth.

In the field of welfare economics, the contingent valuation method, CVM, was introduced as a technique that should allow individuals to express their preferences by essentially stating their WTP when no market price is available. Originally CVM was used to estimate individual attachment to environmental amenities or their preferences to avoid various pollution types. CVM was then opened to other domains (Carson 2011). Nevertheless, its application to local government and urban studies literature is not yet common. Because it utilises hypothetical scenarios, CVM is a very versatile technique. But precisely because of that CVM is also prone to a large number of biases, although this is still an extensively debated issue (Hausman 2012; Carson 2012). These doubts regarding the technique's ability to provide valid estimates must be kept in mind along with the recommendations made to improve the technique's validity (Arrow et al. 1993).

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

3. Methodology and survey design

CVM allowed us to confront individuals with a hypothetical situation of two municipalities about to amalgamate, a situation that does not exist yet, and to state their preference accordingly. Other techniques do exist to measure an individual's preference for non-market goods.[3] However, many of these rely on observing how people make their choices in a real-world setting. In this sense, CVM is far more flexible. The contingent scenario may be framed in many different ways. Individuals can be asked about their WTP, either to benefit from a hypothetical improvement or avoid a hypothetical deterioration of an existing situation. Alternatively, they can be questioned about their willingness to accept (WTA) a compensation either to forgo a hypothetical improvement or to suffer a hypothetical deterioration. Various authors, among whom Arrow et al. (1993), advise against the WTA formulation in order avoid overestimating the value. Since the existing literature points towards an identification loss in case the municipality's name changes after an amalgamation, the scenario is based on a hypothetical deterioration.

Our questionnaire was designed to be administered via phone survey. Various preliminary versions of the questionnaire were tested, paying special attention to the design of the contingent scenario and the WTP question.

Our case study looks at amalgamation projects between neighbouring cities, the first between the municipality of Montreux (M) and Vevey (V); the second between La Chaux-de-Fonds (LCF) and Le Locle (LL). The pairs were chosen not only because the idea of an amalgamation with the neighbouring municipality has already been discussed, but also because all four Swiss jurisdictions are urbanised cities of more than 10,000 inhabitants.[4]

The first part of the questionnaire included questions to gently bring the respondent to the contingent scenario. For example, respondents were asked to what extent they were attached to the name of the municipality they lived in. The hypothetical scenario was as follows[5]:

> Imagine for a second that both populations of Montreux and Vevey had already agreed upon the amalgamation and that, in a second step, the populations are consulted regarding the name of the novel municipality. The chosen name can be either Montreux or Vevey. The choice will depend upon the value that each population puts to the name of its own municipality. Hence, for example, if the population of Vevey puts a higher value to its own name then the novel municipality will be called Vevey. To set the value that every inhabitant put to the name of Montreux they will be asked how much they would be willing to pay through a single payment. Therefore I am going to suggest you a number of amounts; let me know the amount that best fits the single payment that you would agree to pay in order that the name Montreux would be chosen.

A series of increasing bids reflecting the existing Swiss coins and banknotes was proposed: CHF 5, 10, 20, 50, 100, 200, 500,[6] 1,000 and more than CHF 1,000. Respondents were repeatedly asked if they would agree to pay each bid. One person out of two was presented the bids in a decreasing order of magnitude to prevent a starting-point bias. The respondents who were willing to pay a contribution were then given the chance to refine their choice with an open question and to give us a more accurate WTP.[7] Respondents who refused to pay anything were asked debriefing questions to explain their refusal.

The contingent scenario is based on a unique payment by the participant. This solution was retained because it matches the idea that the payment should occur simultaneously with the amalgamation and with the municipal name change. Moreover, in case the canton offers a grant to incentivise the amalgamating municipalities, the grant is paid in one go. The scenario sticks to the valuation-relevant elements that we wanted the respondent to consider in stating his WTP and does not dedicate much attention to payment mechanics to avoid a possible information overload.[8]

Of course any municipal amalgamation triggers various effects aside from a possible change in the jurisdiction name. Significant functional consequences, either positive or negative, are usually expected. These interact with the overall preferences for the amalgamation compared to the status quo. For that reason, our scenario explicitly concentrates on the issue of the name. It specifies that the

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

decision to merge has already been agreed upon by the population of both cities. Therefore, the naming issue is all that remains. This empirical strategy stems from the welfare economics theoretical framework. According to this framework, the individual's utility is separable, meaning that the state of each component influences the individual's well-being independently from the state of the other components, including income (Champ, Boyle, and Brown 2003). To put it differently, the name change has an influence by itself, just in the same way that each functional consequence of the amalgamation independently influences the respondent's satisfaction.

The last part of the questionnaire was dedicated to the respondent's personal characteristics and opinions. The last question was about the respondent's household annual income. If they did not spontaneously answer the question, various income bands were offered for their selection.

The survey was conducted in the spring of 2012 with 800 citizens (about 200 in each municipality) by six trained interviewers. To lower interviewer bias, all interviewers surveyed in every municipality. The sample was randomly chosen from the phone book. It is representative of the repartition between men and women according to the Pearson χ^2 test. However, single and young people (younger than 40) are under-represented as is often the case in surveys dealing with sociopolitical issues (Gaxie 1990). The under-representation stems also from the sampling technique (Link et al. 2007).[9]

4. Survey results

Table 1 describes the answer rate in each municipality (unit response rate). It also shows that more than 60% of the 1,318 contacted persons agreed to answer the survey. It fluctuates within a narrow interval (54–67%) and therefore the number of persons who agreed to answer the survey (803) is also quite evenly distributed.

However, several respondents (298 = 803 – 505) refused to participate in the hypothetical market. Thus the response rate to the WTP question (item response rate) reaches on average 63% of the respondents. This level of (non)response is common in CVM surveys, compared to other types of surveys that have a lower level of item nonresponse.

Table 1. Response rate to the survey and WTP question

Municipality	Number of contacted persons	Number of persons who agreed to answer	Unit response rate	Number of response to the WTP question	Item response rate to the WTP question in %
Montreux (M)	323	187	57.9	119	63.6
Vevey (V)	340	221	65.0	141	63.8
La Chaux-de-Fonds (LCF)	315	211	67.0	130	61.6
Le Locle (LL)	340	184	54.1	115	62.5
Total	1,318	803	61.0	505	62.9

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Ultimately, 505 out of 803 respondents agreed to participate in the market, to state their preferences and to answer the WTP questions. However, they did not behave similarly. Following Grosclaude and Soguel's (1994) classification, and according to the debriefing question answers, a distinction is made between participants who are indifferent (72) or receptive (433). The indifferents are precisely indifferent about the name of the new municipality. Therefore, the value they put on the name is null and their WTP is zero. The receptives, on the other hand, do care about the name and are willing to pay for this. Among the receptives subgroup, an additional distinction is made between the non-solvents (15) and the solvents (418). Indeed non-solvent participants mentioned that they cannot afford to make a bid higher than zero although they care about the name. The solvents gave a strictly positive WTP.

Figure 1 shows how respondents divide into these subgroups (participants, receptives and solvents) in each municipality. Municipalities are quite evenly represented in every subgroup.

For the rest of the article, we will analyse the behaviour of the participants, including people who attributed a positive value to the name (solvents) and others who stated a WTP equal to zero (non-solvents and indifferents). The 298 respondents who did not answer the WTP question are discarded.

Figure 2 displays the WTP distribution according to the highest accepted suggested bids (CHF 0, 5, 10, 20, 50, 100, 200, 500, 1,000 or more than CHF 1,000). Panel A gives the information for Vevey on the left-hand side and Montreux on the right; Panel B for Le Locle (left) and La Chaux-de-Fonds (right). Generally speaking, the WTP is unevenly distributed with an over-representation of low bids (CHF 0 or CHF 5 bids) as is the case in numerous CVM studies. Long tails rise with some outlying observation on the top of the distribution. In general, the values of CHF 500 and more are situated beyond the 9th percentile. These large bids are a possible manifestation of a hypothetical bias.[10] Specifically, the distribution of the WTP is both skewed (skewness = 3.24) with most observations situated on the left side of the mean and leptokurtic (kurtosis = 13.41) with outliers. An overhead resistance at CHF 100 is also noticeable.

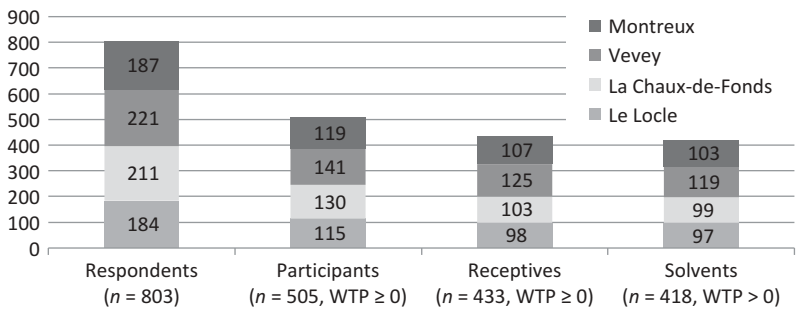


Figure 1. Respondents and participant behaviour on the hypothetical market

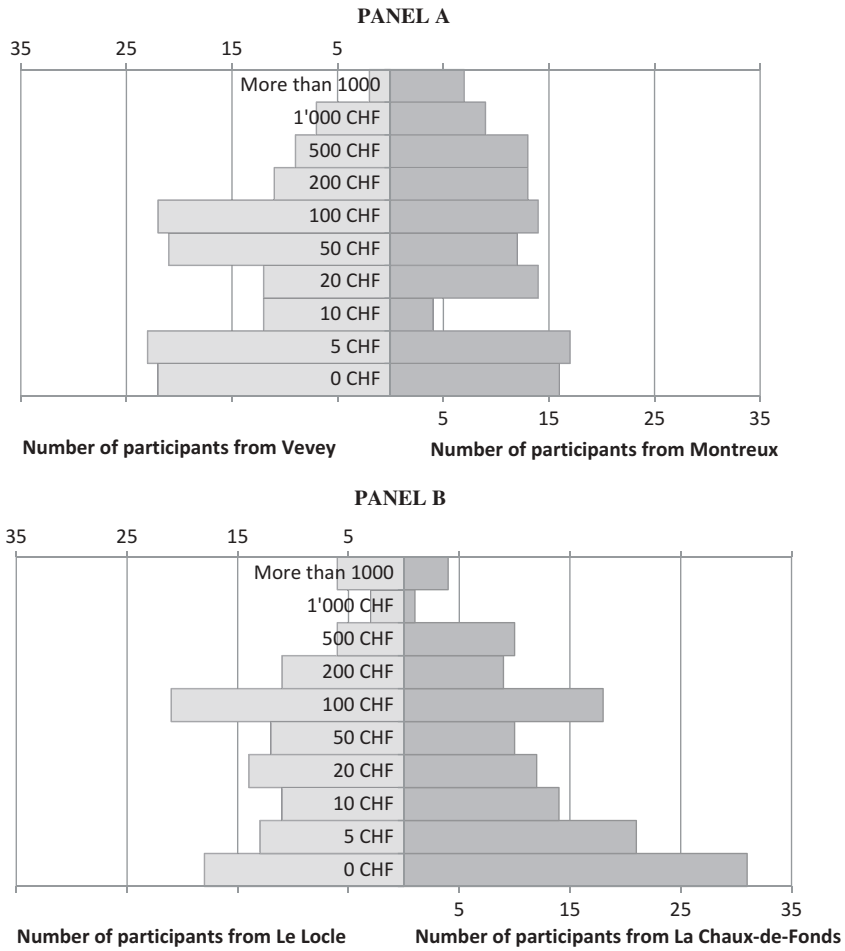


Figure 2. Frequency distribution of the participants according to the level of WTP in both pairs of municipalities ($N = 505$). Panel A: Vevey and Montreux. Panel B: Le Locle and La Chaux-de-Fonds

Montreux (Panel A) and La Chaux-de-Fonds (Panel B) are significantly different from the rest of the sample.[11] The WTP distribution of LCF is strongly packed downwards while Montreux WTPs are more evenly distributed.[12] Compared to Montreux, Vevey WTPs are more centred with only a few observations beyond CHF 1,000.[13]

The WTP may depend on the bid order. To alleviate the so-called starting-point bias, interviewers alternated the bid order one time out of two, beginning once with 'more than CHF 1000' and next with 'at least CHF 5'. Table 2 reports arithmetical mean, geometrical mean and median based on whether the bid process was increasing or decreasing. The figures are computed from the refined reported WTPs, and not from the suggested bids.[14] Whatever the indicator, this

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Table 2. Measures of central tendency of the bids provided by increasing bids process or decreasing bids process

	Arithmetic mean	Geometric mean	Median	Number of observations
Increasing bids (starting from 'at least CHF 5')	81	27	20	246
Decreasing bids (starting from 'more than CHF 1000')	354	146	100	195

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

shows that participants were influenced by starting point. As expected, the increasing process produces lower WTPs. Provided that the incentive to overestimate the WTP in a decreasing process is of the same magnitude as the incentive to underestimate the WTP in an increasing process, the effect on the overall average should level out, provided the numbers of WTPs generated by both processes are equal.

In Table 3, measures of central tendency are extrapolated to provide rough estimates of the value of each municipality's name. Means – both arithmetic and geometric – and median are multiplied by the number of inhabitants to obtain the name values. For instance, in Montreux the participants' arithmetic mean WTP is 290 Swiss francs whereas the median is CHF 50 because of the skewness of the WTP distribution. At CHF 83 the geometric mean is a better instrument to estimate the central value because it is less sensitive to large bids as is the case of the traditional arithmetic mean. The central value in La Chaux-de-Fonds is by far the lowest with a geometric mean value of CHF 42 followed by Vevey (48), Le Locle (58) and Montreux (83).

Estimated by the median and the geometric mean, the loss experienced by the population of Montreux would be CHF 1.3–2.1 millions if the newly amalgamated municipality were named Vevey. For their part, Vevey inhabitants would experience a loss of about CHF 0.9 million, if the municipality would be named Montreux. From a purely arithmetical perspective the difference stems from the

Table 3. Value of the name of the municipalities according to the stated willingness to pay

		Respondents' WTP, in CHF			Value of the name of the municipality, in CHF, based on…		
Municipality	Number of inhabitants	Arithmetic mean	Geometric mean	Median	Arithmetic mean	Geometric mean	Median
Montreux (M)	25,199	290	83	50	7,307,710	2,091,517	1,259,950
Vevey (V)	18,364	152	48	50	2,791,328	881,472	918,200
La Chaux-de-Fonds (LCF)	37,843	143	42	10	5,411,549	1,589,406	756,860
Le Locle (LL)	10,077	203	58	50	2,045,631	584,466	503,850

fact that Vevey has a significantly smaller population and that the mean participant WTP was lower, i.e. they valued their municipality's name less. For La Chaux-de-Fonds and Le Locle, the findings differ more drastically. The mean participant WTP in La Chaux-de-Fonds is 30% lower than in Le Locle. However, since the former is more populated, the overall loss in monetary terms is higher.

At this stage, it thus seems that WTP does not depend much upon the municipality's size. Other factors must explain this difference. The next section is dedicated to identifying these factors.

5. Modelling the willingness to pay

Various econometric models are estimated in order to identify what variables impact WTP. The need to resort to various models stems from the characteristics of the dependant variable, i.e. the participants' WTP.

The WTP variable is truncated since it is not possible to express a negative WTP. Because of this truncation, there is no discrepancy between the WTP of respondents who stated a zero value (and they are quite numerous).[15] The Tobit model allows for dealing with the censoring issue. It is a common way of modelling the WTP (Halstead, Lindsay, and Brown 1991).

However, Tobit models do not address the problem of extreme values. The problem of large bids must be addressed to avoid non-symmetrically distributed errors in the regression analysis. To normalise the error distribution and lower the risk of hypothetical bias by reducing the influence of large bids, we also estimated the WTP function using a log-linear specification, i.e. where the dependent variable is the natural logarithmic of the reported WTP.[16] This specification allows us to comment more intuitively on the coefficients estimated: the estimated coefficients express the relative change in WTP when the value of the considered independent variable varies by one unit.

Table 4 lists the explanatory variables that were constructed using respondent answers. Variables are grouped into four categories. The category including the variables reflecting the ATTACHMENT is here of special interest. The general hypothesis is that the stronger the bond (in particular to the municipality or the name), the higher the value of the municipality's name and thus the higher the WTP. Another group brings together variables dedicated to POLITICAL ASPECTS. An individual's behaviour on the contingent market and the reported WTP may be influenced by political considerations and the participant's ability to deal or feel concerned with political issues, one of these issues being amalgamation. The third group of variables is dedicated to SOCIO-ECONOMIC CHARACTERISTICS, including income.

Finally, dummy variables allow us to distinguish between participants according to the MUNICIPALITY. These dichotomous variables make it possible to estimate models that explain the general WTP trend using the first three groups of variables and still reflect some local differences using the last group of variables. Appendix provides the usual summary statistics regarding the independent variables.

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Table 4. Explanatory variables of the WTP

Variable	Description
ATTACHMENT	
Attach._municipality	Attachment to the municipality. Ordinal variable: 1 = not attached at all; 4 = very attached
Attach._name	Attachment to the municipality name. Ordinal variable: 1–4
Attach._canton	Attachment to the canton. Ordinal variable: 1–4
Contact_people	Contact with people in the municipality. Ordinal variable: 1 = no contact; 4 = very frequent contacts
School_attendance	Place of school attendance. Ordinal variable: 1 = in the municipality; 4 = in another county
Perceived_image	Perceived image of the municipality. Ordinal variable: 1 = poor image of municipality; 4 = very good image
POLITICAL ASPECTS	
Regular_voters	Respondents that vote regularly. Binary variable: 1 = yes, 0 = no
Political_activities	Number of political activities in which respondent participates. Ordinal variable: 0 = no political activities; 5 = five activities mentioned
Info._municipal_life	Degree of information about the municipal life. Ordinal variable: 1 = never informed; 4 = very regularly informed
Political_tendency: left, centre, right	Categorical variable with 3 dummies: left, centre, right. No political tendency is the baseline when left = 0, centre = 0 and right = 0
Vote_no_if_name_change	Respondents that would vote against an amalgamation proposal if the name had to be changed. Binary variable: 1 = vote against the proposal if the name change; 0 = otherwise
Name_interest	Willingness to be integrated in the name change process. Ordinal variable: 1 = do not want to be involved in the process; 4 = definitely want to be involved.
SOCIO-ECONOMIC CHARACTERISTICS	
Gender	Men or women. Binary variable: woman = 1; man = 0
Age	Age of the respondents. Discrete variable
Education	Highest educational level reached. Ordinal variable: 1 = basic scholarship; 4 = university diploma
Income	Annual individual income. Discrete variable from 0 to ∞ (interval width of CHF 20′000)
MUNICIPALITY: Montreux, Vevey, La Chaux-de-Fonds	Categorical variable with 3 dummies: Montreux, Vevey, La Chaux-de-Fonds. Le Locle is the baseline when M = 0, V = 0 and LCF = 0)

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Table 5 shows the main results of the analysis. Since many respondents refused to state their income, this variable is excluded from the first two estimated models in order to increase the number of observations. These two models are therefore based on 488 observations (Model 1 and 2). The last two models (3 and 4) are estimated including the income and are thus based on a restricted number of observations. The issue of a possible multi-collinearity between explanatory variables was investigated by computing the variance inflation factors (VIF) and no sign of such problem appeared.[17] The heteroscedasticity issue was also controlled using computing models with robust standard errors.

Although the first two models use different estimators, results are close to each other, either in terms of sign, degree of significance or magnitude of the

Table 5. Models explaining the WTP for one's municipality name

	Tobit model (Model 1)	Log-linear model (Model 2)	Log-linear model including income (Model 3)	Restricted Log-linear model including income[1] (Model 4)
	Tobit		Linear regressions	
Variables	Coefficients and standard errors (in brackets)			
ATTACHMENT				
Attach._municipality	0.489***	0.356**	0.382**	0.336**
	(0.149)	(0.118)	(0.145)	(0.136)
Attach._name	0.588***	0.487***	0.415***	0.406**
	(0.144)	(0.104)	(0.122)	(0.135)
Attach._canton	0.253*	0.221*	0.311*	0.331
	(0.124)	(0.108)	(0.129)	(0.123)**
Contact_people	0.216	0.164	0.082	–
	(0.145)	(0.115)	(0.138)	
School_attendance	0.135	0.111	0.094	–
	(0.089)	(0.076)	(0.093)	
Perceived_image	0.049	0.081	0.239	–
	(0.158)	(0.132)	(0.161)	
POLITICAL ASPECTS				
Regular_voters	0.265	0.168	0.313	–
	(0.288)	(0.243)	(0.302)	
Political_activities	0.011	0.037	0.006	–
	(0.138)	(0.122)	(0.157)	
Info._municipal_life	0.189	0.148	0.219	–
	(0.156)	(0.126)	(0.156)	
Political_tendency: left	0.109	0.131	0.125	–
	(0.305)	(0.248)	(0.305)	
Political_tendency: centre	0.189	0.218	0.100	–
	(0.374)	(0.308)	(0.372)	
Political_tendency: right	0.201	0.260	0.349	–
	(0.346)	(0.281)	(0.354)	
Vote_no_if_name_change	0.752***	0.580***	0.584**	0.545***
	(0.221)	(0.181)	(0.218)	(0.219)
Name_interest	0.491***	0.363***	0.363***	0.367***
	(0.099)	(0.072)	(0.087)	(0.097)
SOCIO-ECONOMIC CHARACTERISTICS				
Gender	−0.172	−0.160	−0.475*	−0.543*
	(0.209)	(0.186)	(0.220)	(0.204)
Age	−0.002	−0.001	−0.000	–
	(0.006)	(0.005)	(0.007)	
Education	0.476**	0.405**	–	–
	(0.156)	(0.130)		
Income	–	–	0.053	0.076*
			(0.046)	(0.036)
MUNICIPALITY (Le Locle as based line)				
La Chaux-de-Fonds	−0.409	−0.353	−0.141	–
	(0.287)	(0.253)	(0.312)	
Vevey	−0.623**	−0.510*	−0.351	−0.419*
	(0.284)	(0.258)	(0.302)	(0.218)
Montreux	0.091	0.134	0.215	–
	(0.334)	(0.274)	(0.333)	

(*continued*)

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Table 5. (*Continued*).

	Tobit model (Model 1)	Log-linear model (Model 2)	Log-linear model including income (Model 3)	Restricted Log-linear model including income[1] (Model 4)
	Tobit		Linear regressions	
Variables	Coefficients and standard errors (in brackets)			
Constant	5.227***	4.822***	5.166***	6.483***
	(0.940)	(0.777)	(0.943)	(0.525)
N	488	488	366	368
F-test	11.42	9.68	6.58	23.17
Prob > F	0.000	0.000	0.000	0.000
Pseudo-R^2	0.0859	0.2931	0.2762	0.2596

Notes: *significant at 0.05; **significant at 0.01; ***significant at 0.001.

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

coefficient. This demonstrates that the findings do not depend upon a particular methodological choice and are quite robust. Hereafter we focus on the results of the log-linear specification to present the results.

The ATTACHMENT to the municipality and its name or to the canton are all positively and significantly correlated with the WTP. If the attachment to the municipality increases by one degree (e.g. from 1 to 2), the WTP increases by 43% (all other things being equal). Attachment to the municipality's name influences it more strongly (63%), whereas attachment to the canton impacts the WTP to a lesser extent (25%). This agrees with theories in human geography, which consider attachment to places as non-exclusive (Duchesne 2008).

Other variables in the ATTACHMENT category do not significantly influence WTP (contact with people in the municipality, place of scholarship, perceived image of the municipality). This finding somehow contradicts authors who consider that closeness (Di Méo 2007) and shared experience (Pérés 2001) create a sense of belonging to a group.

Most of the variables reflecting the POLITICAL ASPECTS turn out to be insignificant. This confirms previous findings according to which neither the political leaning nor the traditional political divide is relevant for amalgamation issues (Silberstein and Soguel 2012). People that are actively participating in municipal life do not report a significantly different WTP compared to those who are not. In contrast, participants who would vote against a municipal amalgamation if the name of the municipality were changed reported a 58% higher WTP. And participants who are keen to be involved in the naming decision report a WTP that is 36% higher than others.

When it comes to the participant's SOCIO-ECONOMIC CHARACTERISTICS, education level is the only variable that significantly influences the WTP. People with a higher education reported a higher WTP.

Generally, place of residence did not significantly affect WTP. All other things equal, the WTP is the same in Montreux and La Chaux-de-Fonds

compared to that in Le Locle. The only noticeable exception appears in Vevey where the reported WTP was half that reported in Le Locle (and thus in La Chaux-de-Fonds and Montreux since coefficients are not significant in both cases). Neotoponymy theory provides us with some clues about possible reasons for this difference. A population identifies itself more easily with territorial names when the name provides a positive comparison with regard to others, when the name testifies to empirical facts, when it testifies to place history (Adam 2008).

Including the income variable in Model 2 forces a drop of the 'education' variable in Model 3 for collinearity reasons and a sacrifice of some observations due to missing data. Income positively influences the reported WTP; although the influence is statistically not significant at the 95% threshold. The gender variable becomes significant with women reporting a WTP half the size of men's. This is consistent with previous findings in Switzerland (Grosclaude and Soguel 1994).

Model 4 focuses on the income variable and retains only the variables that exert a significant influence on Model 1 to Model 3. As expected, the sign of the relationship to WTP remains unchanged together with the magnitude of the influence. By so doing the influence of the income becomes significant. A one-step increase in the income scale, i.e. a CHF 20,000 increase in annual income, raises the WTP by 8%. Therefore, the impact is quantitatively low compared to that of other independent variables. The fact that the quantitative impact is low saves us the trouble of weighting the WTP according to the income to get a consistent central value, like the ones reported in Table 3 (Bateman et al. 2002). Most of the other variables in Model 4 somehow reflect the utility of the municipality name–or the preferences for it. The fact that WTP is influenced both by individual preferences and income is supported by standard microeconomic theory. This provides us with some confidence that the preferences stated through the WTP by survey participants are internally valid.

6. Conclusion

As an innovative contribution to the literature on place branding and local identity, the present study measures the value of municipal names in monetary terms. The contingent valuation method was used to survey the population on its willingness to pay (WTP) to prevent the loss of a municipality's name after an amalgamation, and thus to avoid a loss of identification and eventually a subsequent and related loss of welfare. Respondents were placed in a hypothetical situation to elicit their WTP. The phone interviews were carried out in four Swiss cities: Montreux, Vevey, La Chaux-de-Fonds and Le Locle. A total of 505 persons agreed to participate in the bidding process. Depending on the municipality, the average geometric WTP varies between CHF 42 in La Chaux-de-Fonds and CHF 83 in Montreux per resident for retaining the municipal name.

From a research perspective, our regression analysis statistically demonstrates that the value of a municipality's name depends upon a range of variables largely

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

in accordance with those suggested by theory or the existing literature. The stated WTP to keep the name of the municipality is higher when the respondent acknowledges a strong attachment to the municipality. The WTP is also higher when the respondent says he would vote against a municipal amalgamation should a referendum on this issue be organised or when the respondent wants to be involved in decisions about the name of the amalgamated municipality. Finally, it increases with the respondent's education level and income. Controlling for these various characteristics explains most of the difference in WTP. These results provide us with some confidence that the stated WTP is internally valid. From this perspective, it would be worth reproducing the analysis in other countries to check to what extent the WTP is sensitive to the historic or political context.

The results are also interesting in showing that many aspects do not influence the value and thus the WTP, among which the individual's political tendency and the political activities as well as where – in which municipality – the respondent lives or his age. If the WTP is to be considered as a proxy for the identification to the municipality, these finding are noteworthy.

Extrapolated on the basis of the geometric mean and the population size, the value of the name of La Chaux-de-Fonds can be estimated to be CHF 1.6 million in case of a possible amalgamation with Le Locle, which is the neighbouring municipality. Oppositely, the name of Le Locle is CHF 0.6 million. The value of the name of Montreux would be CHF 2.1 million in case of amalgamation with the neighbour Vevey. In contrast, the name of Vevey is CHF 0.9 million.

In terms of policy-making, these estimates are useful. They are an indicator of the loss of well-being triggered by the possible name change of a given municipality, even beyond the functional consequences that may also positively or negatively affect resident well-being. In an institutional setting where jurisdictions can freely decide whether or not to merge, the higher level of government can do nothing but incentivise municipalities if it wants them to amalgamate. This is especially true when the decision should be put forward in a referendum. This institutional setting prevails in about half of the Swiss cantons where approval by the affected municipalities is required and where amalgamating municipalities are financially rewarded. To impact the decision, the appropriate financial incentive should be large enough to compensate the amalgamating municipalities and their population for the name loss. To give a concrete example, let us consider the case of Vevey and Montreux. The legislation rules that if these two municipalities would merge then the higher level of government – in this case the canton of Vaud – should offer the new city a reward of around CHF 1.1 million.[18] Compared to our estimates, this amount is significantly insufficient to compensate for the loss of the name in case the new jurisdiction would be named Vevey, since the estimated lost well-being for the inhabitants of Montreux is CHF 1.6 million. In comparison, if the new jurisdiction would to be named Montreux, the amount would suffice since the estimated well-being loss for the inhabitants of Vevey is CHF 0.9 million. All other things being equal and especially the functional consequences of the amalgamation,

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

this demonstrates the importance of both an adequate compensation by the higher level of government and the choice of the new jurisdiction's name. These two aspects increase the chance for amalgamation projects to be accepted, when forced amalgamations are not an option.

Acknowledgements

We thank the interviewers who conducted the survey and all the respondents who took the time to answer them. For comments on an earlier draft we are indebted to seminar participants on various occasions, to two anonymous reviewers and to Michelle Bailat-Jones for her editing assistance.

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Nils Soguel is a professor of Public Finance at the Swiss Graduate School of Public Administration – IDHEAP (University of Lausanne, Switzerland). He is also the chairman of the Swiss Public Sector Financial Reporting Advisory Committee. His research interests include public sector financial management, fiscal policy, fiscal federalism and valuation of nonmarket goods. He has written, co-authored or edited several books along with numerous articles in professional journals.

Julie Silberstein is a research fellow in public administration at the University of Lausanne. Her research interests include political sciences, amalgamations, identification to local municipalities and valuation of nonmarket goods. A previous article on municipal mergers with Soguel entitled 'Ex-Post Survey on the Consequences and Perceptions about Amalgamation' appeared in *Urban Public Economics Review* (Vol.16, 2012).

Notes

1. In 2013, the Swiss Federal Statistical Office reported 2,396 municipalities with an average population of 3,397 inhabitants. The median size was 1,312 inhabitants. The gap between the average and the median shows that many Swiss municipalities are tiny. Only 147 municipalities are statistically considered cities (by having a population greater than 10,000).
2. The full questionnaire and the database can be obtained by contacting the authors.
3. See Champ, Boyle, and Brown (2003) for a description of the most commonly used nonmarket valuation techniques.
4. In the first pair, Montreux (25,199 inhabitants in 2012) is, however, bigger than Vevey (18,364) and, in the second pair, La Chaux-de-Fonds (37,843) is bigger than Le Locle (10,077). Each pair is located within a single agglomeration area. The respective financial positions are somehow diverse. In 2012, at the time of the survey, Montreux was the least indebted municipality with a 10% ratio of its gross debt to its

operating revenue, compared to 144% for Vevey, 173% for La Chaux-de-Fonds and 108% for Le Locle. An amalgamation project has been under discussion between Montreux and Vevey, together with eight other municipalities, since 2011. At the time of writing, the project is in a technical phase with experts looking for answers to the various issues to be addressed (land-use planning, economic development, taxation and finance, etc.). Between 2003 and 2007, a possible merger between La Chaux-de-Fonds and Le Locle was designed by the executive branch of the two municipalities. An information campaign was launched together with an opinion poll. Eventually the executive branch of Le Locle decided to pull back. Both projects have benefited from a pretty extensive coverage by the local press. Newspapers still conjecture on future amalgamation from time to time.

5. The wording of the scenario is given as if the respondent was a resident of Montreux. In case the respondent was a resident of Vevey, the wording was adapted accordingly by swapping the name Montreux with Vevey. As for the amalgamation project between LL and LCH, the wording was adapted accordingly to reflect the respondent's residency. The scenario is of course hypothetical. In reality, after an amalgamation takes place the new municipality can be named after either of the pre-existing jurisdictions or with a totally different name. Anyway it is not possible to speculate over the name that would be chosen in case the merger ever happens. Some would argue that the name 'Montreux' is more well-known than 'Vevey' and that the name 'La Chaux-de-Fonds' than 'Le Locle'. But it does not mean that the most famous name would be retained. Indeed, as will become clear in next sections, the elicited WTP is not necessarily higher for the name of Montreux or La Chaux-de-Fonds, compared to the one for Vevey or Le Locle.
6. Admittedly, there is no CHF 500 banknote. However, the gap between CHF 200 and CHF 1,000 was too large and needed to be bridged. CHF stands for Swiss francs. At the time of writing, € and CHF were almost at parity. However, when the survey was carried out, 1 € was worth 1.2 CHF.
7. 58 respondents actually chose to refine their choice.
8. The various tests we conducted on preliminary versions of the questionnaire dissuaded us from providing the respondent with additional details via the scenario, especially to take into account respondent cognitive capacities. For instance, no additional information was provided regarding the payment vehicle (tax, fee, bill, etc.) or the way the paid amounts would be redistributed. This has the notable advantage that the scenario remains neutral with respect to the good to be valued, i.e. the municipality name. Indeed we are most interested in the unbiased value of the name. Information about how payment collection, to whom it goes and so on may have influenced the respondent and thus biased the stated WTP. See Mitchell and Carson (1989, 2016–2017).
9. Young people often only possess a mobile phone and are rarely registered in the phonebook.
10. This kind of bias arises because of the hypothetical situation respondents are facing in a CV survey, when respondents report a WTP that exceeds the amount they would actually pay if the market really existed.
11. The distribution is significantly different according to the Kolmogorov–Smirnov test.
12. There is a significant difference at the 0.05 significance level between M and LCF according to Bonferroni (0.035), Scheffe (0.054) and Sidak (0.034) test.
13. There is a significant difference at the 0.05 level between M and V according to Bonferroni (0.049) and Sidak (0.034) tests (note that here Scheffe test is not significant at the 0.05 level).
14. For example, when the last suggested bid, say CHF 10, was accepted and when the participants refined the value to CHF 12, then the reported WTP is CHF 12.

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

15. Some indifferent respondents might prefer the name of the other municipality. Thus they may have an even smaller interest in the name of their municipality than those who simply do not care.
16. The relevance of the choice of a log-linear specification was checked by running a Box–Cox transformation. The log-linear specification is situated with a 95% probability in the interval provided by the computed Box–Cox model. A value of CHF 1 is added to all reported WTPs to avoid zeros (Mitchell and Carson 1989, 372).
17. All Variance Inflation Factors (VIF) are by far smaller than 10.
18. The formula provided by the legislation foresees a transfer of CHF 250 per person. This amount is then multiplied by the size of the population and then capped at a maximum of 3,000 inhabitants whatever the actual number of inhabitants. It is also multiplied by an incentive factor that increases with the number of amalgamating municipalities. In case of two jurisdictions, the factor is 1.5. Therefore, should M and V amalgamate, they would receive a transfer of CHF 1.125 million (= 250 × 3000 × 1.5).

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

References

Adam, F. 2008. *Des noms et des lieux: La médiation toponymique au Québec et en Acadie du Nouveau-Brunswick*. Paris: Université Paris IV.

Anholt, S. 2006. "The Anholt-GMI City Brands Index: How the World Sees the World's Cities." *Place Branding* 2 (1): 18–31. doi:10.1057/palgrave.pb.5990042.

Arrow, K., R. Solow, P. R. Portney, E. Leamer, R. Radner, and H. Schuman. 1993. "Natural Resource Damage Assessment under the Oil Pollution Act of 1990." *Federal Register* 58 (10): 4601–4614.

Bartolini, D., and F. Fiorillo. 2008. "Local Council Partnerships: A Theoretical Approach." In *The Theory and Practice of Local Government Reform*, edited by B. Dollery and L. Robotti, 53–68. Cheltenham: Edward Elgar.

Bateman, I. J., R. T. Carson, B. Day, M. Hanemann, N. Hanley, T. Hett, and J. Swanson. 2002. *Economic Valuation with Stated Preference Techniques*. Cheltenham: Edward Elgar. doi:10.1080/0042098984718.

Bourdieu, P. 1980. "L'identité et la représentation." *Actes de la recherche en sciences sociales* 35: 63–72. doi:10.3406/arss.1980.2100.

Carson, R. T. 2011. *Contingent Valuation: A Comprehensive Bibliography and History*. Cheltenham: Edward Elgar.

Carson, R. T. 2012. "Contingent Valuation: A Practical Alternative when Prices Aren't Available." *Journal of Economic Perspectives* 26 (4): 27–42. doi:10.1257/jep.26.4.27.

Champ, P. A., K. J. Boyle, and T. C. Brown. 2003. *A Primer on Nonmarket Valuation. Vol. 3 of The Economics of Non-Market Goods and Resources*. Dordrecht: Kluwer Academic Publishers.

Debarbieux, B. 2006. "Prendre position: Réflexions sur les ressources et les limites de la notion d'identité en géographie." *Espace géographique* 340–354: 4–35.

Delattre, E. 2007. "Renaming the French «communes»: Economic, Marketing and Strategic Aspects." *Revue D'économie Régionale Et Urbaine* 2: 269–291. doi:10.3917/reru.072.0269.

Di Méo, G. D. 2007. "Identités et territoires: Des rapports accentués en milieu urbain?" *Métropoles* 1: 69–94.

Dollery, B. E., and A. Akimov. 2009. "Shared Services in Australian Local Government: Rationale, Alternative Models and Empirical Evidence." *Australian Journal of Public Administration* 68 (2): 208–219. doi:10.1111/j.1467-8500.2009.00635.x.

Duchesne, S. 2008. "Waiting for European Identity. Reflections on the Process of Identification with Europe." *Perspectives on European Politics and Society* 9 (4): 397–410. doi:10.1080/15705850802416796.

Gaxie, D. 1990. "Au-delà des apparences. Sur quelques problèmes de mesure des opinions." *Actes de la recherche en sciences sociales* 81: 97–112. doi:10.3406/arss.1990.2929.

Grosclaude, P., and N. Soguel. 1994. "Valuing Damage to Historic Buildings Using a Contingent Market: A Case Study of Road Traffic Externalities." *Journal of Environmental Planning and Management* 37 (3): 279–287. doi:10.1080/09640569408711976.

Halstead, J. M., B. E. Lindsay, and C. M. Brown. 1991. "Use of the Tobit Model in Contingent Valuation: Experimental Evidence from the Pemigewasset Wilderness Area." *Journal of Environmental Management* 33 (1): 79–89. doi:10.1016/S0301-4797(05)80049-0.

Hanes, N., M. Wikström, and E. Wångmar. 2012. "Municipal Preferences for State-Imposed Amalgamations: An Empirical Study Based on the Swedish Municipal Reform of 1952." *Urban Studies* 49 (12): 2733–2750. doi:10.1177/0042098011429488.

Hausman, J. 2012. "Contingent Valuation: From Dubious to Hopeless." *Journal of Economic Perspectives* 26 (4): 43–56. doi:10.1257/jep.26.4.43.

Jones, P., and N. Soguel. 2010. "Fiscal Federalism at the Ballot Box: The Relevance of Expressive Voting." *Review of Law and Economics* 6 (3): 469–485. doi:10.2202/1555-5879.1536.

Kavaratzis, M., and G. J. Ashworth. 2005. "City Branding: An Effective Assertion of Identity or a Transitory Marketing Trick?" *Journal of Economic and Social Geography* 96 (5): 506–514. doi:10.1111/j.1467-9663.2005.00482.x.

King, D. N., and Y. Ma. 2000. "Local Authority Size in Theory and Practice." *Environment and Planning C: Government and Policy* 18 (3): 255–270. doi:10.1068/c9856.

Kotler, P., and D. Gertner. 2002. "Country as Brand, Product, and Beyond: A Place Marketing and Brand Management Perspective." *Journal of Brand Management* 9 (4): 249–261. doi:10.1057/palgrave.bm.2540076.

Kushner, J., and D. Siegel. 2005. "Citizens Satisfaction with Municipal Amalgamations." *Canadian Public Administration* 48 (1): 73–95.

Le Bart, C. 1999. "Les politiques d'image: Entre marketing territorial et identité locale." In *Les nouvelles politiques locales: Dynamiques de l'action publique*, edited by R. Balme, A. Faure, and A. Mabileau, 415–427. Paris: Presses de Science Po.

Link, M. W., M. P. Battaglia, M. R. Frankel, L. Osborn, and A. Mokdad. 2007. "Reaching the U.S. Cell Phone Generation. Comparison of Cell Phone Survey Results with an Ongoing Landline Telephone Survey." *Public Opinion Quarterly* 71 (5): 814–839.

Lynch, K. 1960. *The Image of the City*. Cambridge, MA: MIT Press.

Mitchell, R. C., and R. T. Carson. 1989. *Using Surveys to Value Public Goods: The Contingent Valuation Method*. Washington, DC: Resources for the Future.

National Office of Local Government. 1998. *Local Government National Report 1997–98*. Canberra: Commonwealth Department of Transport and Regional Services.

Pérés, H. 2001. "Identité nationale et sociologie de la connaissance. Notes pour une comparaison de la construction identitaire en France et en Espagne." *Pôle Sud* 14: 57–71. doi:10.3406/pole.2001.1105.

Silberstein, J., and N. Soguel. 2012. "Ex-Post Survey on the Consequences and Perceptions about Amalgamation." *Urban Public Economics Review* 16: 43–60.

Steiner, R. 2003. "The Causes, Spread and Effects of Intermunicipal Cooperation and Municipal Mergers in Switzerland." *Public Management Review* 5 (4): 551–571. doi:10.1080/1471903032000178581.

Stiglitz, J. E. 1983. "The Theory of Local Public Goods Twenty-Five Years after Tiebout: A Perspective." In *Local Provision of Public Services: The Tiebout Model after Twenty-Five Years*, edited by G. R. Zodrow, 17–53. New York: Academic Press.

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015

Appendix: Variables summary

Variable	*N*	Mean	Std. Dev.	Min	Max
ATTACHMENT TO THE COMMUNITY					
Attach._municipality	793	1.825	0.955	1	4
Attach._name	786	2.155	0.976	1	4
Attach._canton	795	2.069	0.978	1	4
Contact_people	795	1.987	0.849	1	4
School_attendance	773	2.379	1.155	1	4
Perceived_image	784	2.041	0.782	1	4
POLITICAL ASPECTS					
Regular_voters	803	0.706	0.456	0	1
Political_participation	803	1.029	0.979	0	5
Info._municipality	794	1.936	0.819	1	4
Left_tendency	803	0.430	0.495	0	1
Centre_tendency	803	0.128	0.335	0	1
Right_tendency	803	0.188	0.391	0	1
No_tendency*	803	0.254	0.436	0	1
Vote_no_if_name_change	803	0.484	0.500	0	1
Name_interest	779	1.870	1.253	1	4
SOCIO-ECONOMIC CHARACTERISTICS					
Gender	803	1.529	0.499	1	2
Age	775	56.819	17.280	18	100
Education	771	2.166	0.707	1	3
Income	559	5.544	2.645	1	26
MUNICIPALITY					
Montreux	803	0.233	0.423	0	1
Vevey	803	0.275	0.447	0	1
La Chaux-de-Fonds	803	0.263	0.440	0	1
Le Locle	803	0.229	0.421	0	1

Downloaded by [Universitaire De Lausanne] at 05:48 11 August 2015