Economic Recessions, Discretionary Fiscal Resources, and Government Contracting

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ABSTRACT

This study aims to reconcile two opposing positions on the relationship between economic recessions and contracting, presented by the government contracting literature and the public finance literature. In addition, the effect of discretionary fiscal resources is considered from a resource dependence perspective. Panel data analyses are conducted on 260 California cities with populations over 25,000 for the past 17 fiscal years from 1992 to 2008. Results indicate that city governments tend to spend more money on contracting when they face a worsening economy, supporting the government contracting literature. The two incompatible positions seem to originate from different assumptions on whether city governments are able to sustain existing levels of overall local services during economic downturns. Results also suggest that more discretionary fiscal resources, in the form of undesignated unreserved fund balances, are likely to be used less for contracting.

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1. Introduction

People suffer from economic fluctuations. Governments can play a role in moderating harmful effects on them. The recent recession has made public management researchers re-visit traditional topics such as government contracting. It is because quality of living is substantially dependent on government services. Many city services are produced by third party contractors which are nonprofit organizations, for-profit firms, or other government agencies. Therefore, it is practically relevant to explore strategic behaviors of city governments related to choices of contracting in face of economic fluctuations.

In addition to practical relevance, there is also theoretical importance since theoretical tension exists between the theoretical perspective of government contracting and that of public finance. The government contracting perspective argues that a recession turns a city government to more contracting (e.g., Stein, 1990). Yet, its alternative in public finance implies the opposite: a recession leads to less contracting. In addition to attempting to resolve the tension, this study also endeavors to enrich the two perspectives by adding the analysis with resource dependence theory, which emphasizes the role of discretionary fiscal resources, i.e., fund balances.

This paper begins by reviewing the relevant literatures from government contracting and public finance perspectives. From the reviews, three hypotheses are developed. Then, panel data analyses for testing the hypotheses will be conducted with a public finance dataset of 260 California cities with populations over 25,000 for the past 17 years from 1992 to 2008. Discussion on the results will follow.
2. Literature Review

1) Government contracting

Many of influential studies on government contracting (e.g., Brown and Potosky, 2003; Ferris and Graddy, 1994; Stein, 1990; Brudney, Fernandez, Ryu, and Wright, 2005) propose a relationship between recessions and contracting. First of all, Stein (1990) argues that contracting as a representative indirect mode of service delivery arrangements can be developed as a useful means of providing and producing services by local governments facing an economic recession. It is because a recession imposes urgent need for fiscal frugality on local governments since taxpayers dislike tax increase (Stein, 1990: 83).

Two subsequent works explore choices of contracting with a transaction cost perspective. First, Ferris and Graddy (1994: 129) argue that contracting decisions are made based on consideration of service delivery costs, which include production costs and transaction costs (Ferris and Graddy, 1994: 127). They characterize production costs as easy to see and measure while transaction costs are not so (Ferris and Graddy, 1994: 129). Relative weight between the two is made according to macroeconomic conditions or citizen’s preferences (Ferris and Graddy, 1994: 129). For example, economic downturn makes a city government take savings of production costs into account more than those of transaction costs, since production costs are easy to cut (Ferris and Graddy, 1994: 129). Building on a similar logic, Brown and Potosky (2003: 464) argue, “[e]xternal contracting may save costs, but can be riskier, at least for services with higher transaction costs risks.” Apparently, ‘save costs’ here means ‘save production costs’ in Ferris and Graddy’s usage.
Looking through many existing studies, Brudney, Fernandez, Ryu, and Wright (2005: 395) summarize “in the presence of competition, government agency contracting for services should result in cost savings or lower spending for those services produced by external providers.” Since it is obvious that the need for cost savings gets stronger when the economy goes bad, the following hypothesis can be built:

**Hypothesis 1a: economic recessions are positively related to contracting.**

2) Public finance

While it is not necessarily about contracting but more about debts, revenues, expenditures, taxes, assets, liabilities, accounting (Kioko, Marlowe, and their colleagues, 2011: i113), part of the public finance scholarship hints at a different argument; put simply, a worsening economy causes less contracting. This argument is suggested by a few studies. First, Marlowe (2005) explores a stabilizing role of available fiscal resources on expenditures in the presence of economic downturn. This study assumes that expenditure cuts are caused by economic downturns (Marlowe, 2005: 49). In a similar research on the mitigating role of fiscal resources on deficits and surpluses, Hendrick (2006) says “[l]acking adequate reserves, they [state governments] were forced to cut spending deeply…” during fiscal crises (Hendrick, 2006: 14). It is conceivable that local governments are also faced with a similar situation.

The more recent study by Hou and Moynihan (2008), which is about state government behaviors dealing with difficult economic situations, gives a clear explanation on budget cuts; they argue that “budget cuts are emergency measures that states take to cope with surprise revenue shortfalls from the business cycle” (Hou and Moynihan, 2008: 145). According to them, this is one of the two likely means taken by a government together with so-called “revenue
actions” which are “planned and designed to increase revenue in the next fiscal years to deal with the cyclical shortfall” (Hou and Moynihan, 2008: 145).

Even with such quick glimpses, we can safely state the position of this part of the public finance literature: once the economy goes difficult, city governments react by reducing expenditures and raising revenues. Since expenditures here include use of money for contracting, the following hypothesis, which is the exact opposite with Hypothesis 1a, is formulated:

**Hypothesis 1b: economic recessions are negatively related to contracting.**

3) Evaluation

First, the contracting literature and the public finance literature have developed separately without active interactions. This study is an effort to answer a current call for connecting the two (Kioko, Marlowe and their colleagues, 2011: ii13).

Next, it is rare to consider fund balances as a promising fiscal variable in the contracting literature, unlike the public finance literature (Marlowe, 2005; Hendrick, 2006; Hou and Moynihan, 2008). This study aims to contribute to the contracting scholarship by bringing the fiscal variable into account.

Lastly, this study seeks to introduce a branch of organization theory, i.e., resource dependence, to the contracting literature, which has benefitted predominantly from institutional economics. It is always meaningful to add another relevant well-established social science theory (Tang and Mazmanian, 2010: 7) in order to enrich the existing literature.

4) Resource Dependence

In addition to the two hypothesized impacts of economic recession on contract expenditures, available fiscal resources of municipal governments are also important. A
perspective within organization theory, resource dependence, inspired by Pfeffer and Salancik (1978), has been widely employed in public management (e.g., Delfin and Tang, 2008; Suárez, 2009; Saidel, 1991; Guo and Acar, 2005). The seminal work of Pfeffer and Salancik (1978) argues that survival chances of an organization largely depend on its capacity to obtain necessary resources from its resource environment (Pfeffer and Salancik, 1978: 2). As organizations are highly vulnerable to their resource environments, an environmental shock such as a recession would have substantive impacts on local governments.

While organizations are heavily affected by their environments, resource dependence theory does not necessarily exclude possibilities of strategic behaviors of each organization to tackle challenges from the environments (Suárez, 2009: 272). Such strategic behaviors include buffering, referring to retaining and using internal available resources of an organization (Thompson, 1967: 20) to “absorb[s] environmental fluctuations” (Thompson, 1967: 21), and balancing, an effort to achieve a balanced relation between two parties by making equal dependence on each other (Emerson, 1962: 34).

In this context, it is expected that city governments as a type of organization strive to forecast difficult economic situations and store discretionary fiscal resources according to the forecasts. Such organizational activities enable a government to utilize stored resources later as a buffer during unfavorable economic situations, thereby mitigating potentially adverse effects in the future. Following this organizational perspective from which organizations strive to protect themselves against harmful environments, it is reasonable to predict that discretionary fiscal resources will play a positive role with contracting in the presence of recessions:

*Hypothesis 2: Discretionary fiscal resources are positively related to contracting.*
The current discussion is summarized at the following <Exhibit 1>:

<Exhibit 1: Conceptual Framework>

3. Data and methods

This study employs a financial dataset on cities from the <City Finance> database at RAND California,¹ from which data of financial variables such as size of contract services, discretionary fiscal resources, intergovernmental revenues, and government size are obtained. The <City Finance> database originates from *Cities Financial Transactions Report*, annually reported by each city to the California State Controller within 110 days after the completion of each fiscal year (California State Controller, 2005: 5). This Report is legally required to all California cities for the purpose of “provid[ing] financial data about California cities on a basis as uniform and comparable as possible.” (California State Controller, 2005: 4). The fact that the <City Finance> database was prepared based on legally required data makes it a reliable data

¹ [http://ca.rand.org/](http://ca.rand.org/)
source, nevertheless it should be noted that each report was not necessarily audited by a third party (California State Controller, 2005: 5).

All non-financial variables such as economic recession, city size, and county wealth are hypothesized to have an impact on the dependent variable, size of contract services with a 0.5 year lag. These variables are noted with t-1.5. On the other hand, all financial variables such as discretionary fiscal resources, intergovernmental revenues, and government size do not have such a time lag, which are noted with t-1. This issue emerges because the financial dataset is arranged by fiscal year mostly beginning July 1 to June 30 next year, while the data for all the non-financial variables is collected by calendar year. All entries for county wealth in addition to all the financial variables are converted to 2005 constant dollars, which are adjusted for inflation, and to per capita form. These treatments facilitate comparison and interpretation of data and results.

This study investigates 260 cities with populations over 25,000 for the past 17 years from 1992 to 2008 fiscal years. More details on variables, measures, and sources of data follow and are summarized at <Exhibit 2>.
<Exhibit 2: Variables, Measures, and Sources of data>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measures</th>
<th>Sources of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of contract services</td>
<td>Per capita expenditures for contract services ($)</td>
<td>&lt;City Finance&gt; at RAND California</td>
</tr>
<tr>
<td>Economic recession</td>
<td>Unemployment rate t-1.5 (%)</td>
<td>&lt;Local Area Unemployment Statistics&gt; at Bureau of Labor Statistics</td>
</tr>
<tr>
<td>Discretionary fiscal resources</td>
<td>Total fund balances per capita t-1 ($)</td>
<td>&lt;City Finance&gt; at RAND California</td>
</tr>
<tr>
<td></td>
<td>Unreserved fund balances per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unreserved undesignated fund balances per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td>Intergovernmental revenues</td>
<td>Federal, Functional per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>County, Functional per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>County, General per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>State, Functional per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>State, General per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td>Government size</td>
<td>Total revenues per capita t-1 ($)</td>
<td></td>
</tr>
<tr>
<td>City size</td>
<td>Population t-1.5 (persons)</td>
<td>&lt;Population and Demographics&gt; at RAND California, but originally from Bureau of Census</td>
</tr>
<tr>
<td>County wealth</td>
<td>Per capita personal income by County t-1.5 ($)</td>
<td>&lt;Business and Economic Statistics&gt; at RAND California, but originally from Bureau of Economic Analysis</td>
</tr>
</tbody>
</table>

1) **Dependent variable**

The dependent variable is size of contract services, which is measured by per capita expenditures for contract services. Data are obtained from the <City Finance> database at the RAND California.

2) **Independent variables**

   (1) **Economic recession**: According to the National Bureau of Economic Research, Inc. (NBER), an economic recession is defined as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.”

measured by unemployment rate. Data are collected from <Local Area Unemployment Statistics> at the Bureau of Labor Statistics.

(2) **Discretionary fiscal resources:** Three measures are employed: total fund balances, unreserved fund balances, and undesignated unreserved fund balances. Total fund balances consist of reserved and unreserved fund balances. The latter is further divided into designated and undesignated fund balances. Total fund balances are the least discretionary of the three since they include reserved fund balances, “the portion of fund equity that is legally segregated for specific purposes” (California State Controller, 2005: 127). Undesignated fund balances, “the portion of fund balance that is unrestricted as to its use” (California State Controller, 2005: 127), are the most discretionary. Unreserved fund balances are in the middle as they include designated fund balances, referring to “the portion of fund balance segregated to indicate tentative plans for financial resource utilization in a future period, such as for general contingencies or for equipment replacement” (California State Controller, 2005: 127).

One of the primary differences between reserved and unreserved fund balances is whether they are legally obligated for a specific purpose or not. The former is legally obligated and the latter is not (City of Saratoga, 2009: A-20). Designated part of unreserved fund balances can be modified according to choices of city councils (City of Saratoga, 2009: A-20). Data for these measures come from the <City Finance> statistics, RAND California.

3) **Control variables**

(1) **Intergovernmental revenues:** Several public finance studies (e.g., Marlowe, 2005; Hendrick, 2006) recognize the importance of intergovernmental revenues as a control variable. Recognizing the limitations of expressing this variable as a single aggregate measure, this
research attempts to classify this variable into five specific measures by revenue purposes (functional and general) and levels (federal, state, county). This classification creates five separate control measures: federal functional, county functional, county general, state functional, and state general. Please note that federal general revenues do not exist, meaning that all the revenues from the federal government should be spent for a specific purpose, defined by the federal government. For example, Community Development Block Grant (CDBG) should be used for community development.

One of the main differences between fund balances and revenues is that the former is a remaining amount, calculated at a point of time such as the end of a fiscal year while the latter is the summed amount covering a time period such as one whole fiscal year.\(^3\) Data come from the <City Finance> statistics of the RAND California.

(2) **Government size**: This is measured by total revenues per capita, data of which are obtained from the RAND <City Finance> statistics.

(3) **City size**: This is captured by city population. Data are acquired from <Population and Demographics> statistics of the RAND California, which originates from the Bureau of Census.

(4) **County wealth**: This is indicated by per capita personal income measured at the county level. Unfortunately, personal income by city is not available. Thus, interpretation of the analysis requires caution. Data come from <Business and Economic Statistics> at the RAND California, but originally from the Bureau of Economic Analysis.

This empirical study was also designed to test the effects of three institutional variables including contract versus full-service cities, council-manager versus other forms, and charter

\(^3\) [www.principlesofaccounting.com/chapter1/chapter1.html](http://www.principlesofaccounting.com/chapter1/chapter1.html), retrieved on May 09th 2011
versus general-law cities. Unfortunately, all the three are automatically dropped by the statistical program, STATA due to multicollinearity. It is possible that these variables might be highly correlated with government size, city size, or county wealth.

Descriptive statistics of the whole data are reported at <Exhibit 3>.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract expenditures per capita ($)</td>
<td>3,440</td>
<td>217.910</td>
<td>230.249</td>
<td>0</td>
<td>2,778.429</td>
</tr>
<tr>
<td>Unemployment rate t-1.5 (%)</td>
<td>5,042</td>
<td>6.568</td>
<td>4.025</td>
<td>1.012</td>
<td>38.693</td>
</tr>
<tr>
<td>Total fund balances per capita t-1 ($)</td>
<td>4,418</td>
<td>702.494</td>
<td>583.741</td>
<td>-180.825</td>
<td>5,496.162</td>
</tr>
<tr>
<td>Unreserved fund balances per capita t-1 ($)</td>
<td>4,418</td>
<td>457.409</td>
<td>447.734</td>
<td>-753.196</td>
<td>5,393.677</td>
</tr>
<tr>
<td>Undesignated fund balances per capita t-1 ($)</td>
<td>4,418</td>
<td>260.807</td>
<td>364.651</td>
<td>-753.196</td>
<td>5,393.677</td>
</tr>
<tr>
<td>Federal functional revenues per capita t-1 ($)</td>
<td>4,405</td>
<td>43.561</td>
<td>66.235</td>
<td>-2.637</td>
<td>1,192.943</td>
</tr>
<tr>
<td>County functional revenues per capita t-1 ($)</td>
<td>3,616</td>
<td>8.654</td>
<td>22.985</td>
<td>-11.077</td>
<td>529.125</td>
</tr>
<tr>
<td>County general revenues per capita t-1 ($)</td>
<td>3,616</td>
<td>.760</td>
<td>4.796</td>
<td>0</td>
<td>94.052</td>
</tr>
<tr>
<td>State functional revenues per capita t-1 ($)</td>
<td>4,402</td>
<td>52.748</td>
<td>56.559</td>
<td>1.227</td>
<td>875.982</td>
</tr>
<tr>
<td>State general revenues per capita t-1 ($)</td>
<td>4,402</td>
<td>44.821</td>
<td>20.822</td>
<td>265</td>
<td>211.405</td>
</tr>
<tr>
<td>Total revenues per capita t-1 ($)</td>
<td>4,402</td>
<td>1,186.546</td>
<td>884.946</td>
<td>99.517</td>
<td>8,491.669</td>
</tr>
<tr>
<td>Population t-1.5 (persons)</td>
<td>5,198</td>
<td>96,949.86</td>
<td>250,622</td>
<td>6,989</td>
<td>3,831,868</td>
</tr>
<tr>
<td>Per capita personal income t-1.5 ($) by County</td>
<td>5,042</td>
<td>35,857.1</td>
<td>9,580.157</td>
<td>19,190</td>
<td>88,514</td>
</tr>
</tbody>
</table>

4) Models

Four models are investigated alternatively by adding different parts of fund balances. The first model is a basic model without fund balance measures. The next three models include each of the three fund balance measures in the increasing extent of discretion from total fund balances (Model 2), unreserved fund balances (Model 3), to undesignated fund balances (Model 4).
(1) **Fixed effects vs. pooled OLS estimation**: All F statistics throughout the four models for selecting either fixed effects or pooled OLS estimation reject the null hypothesis that all error terms, capturing “effects of omitted individual-specific variables” stable over time (Hsiao, 2003: 34), are zero (Min and Choi, 2009: 131). These F statistics are reported at Note 3, <Exhibit 4>. Therefore, fixed effects estimation is consistently chosen over the pooled OLS estimation at all the four models.

(2) **Fixed vs. random effects estimation**: A choice of either fixed effects or random effects estimation can be justified at theoretical and technical dimensions. Theoretically, it is argued that fixed effects estimation is desired for the purpose of investigating “the effects that are in the sample,” (Hsiao, 2003: 43) while its alternative is prescribed for that of pursuing to know “the population characteristics” based on supposedly random sample (Hsiao, 2003: 43). Since data of this research are not a sample but population itself, fixed effects estimation is more appropriate.

    At the technical dimension, the Hausman test was conducted as seen at Note 4, <Exhibit 4>. Over all the four models, sufficient Chi square statistics, ranging from 76.96 to 82.89, constantly reject the null hypothesis that differences in coefficients of fixed and random effects estimation are not systematic. Since random effects estimators are inconsistent in this situation, fixed effects estimators are preferred again (Min and Choi, 2009: 194; Hsiao, 2007: 9).

### 4. Results

1) **Goodness of fit**

    Two indicators of goodness of fit show somewhat mixed signs. F statistics from about 6 to 28 mean that those specified models have a good fit because such relatively high F values
indicate that we would not have observed the estimated parameters if all true parameters had been zero. Regarding the values of R-squared, 6-7 percents mean that each model explains 6-7 percents of the whole variations around the dependent variable. Surely, these values are not very high. Still, considering driving forces of even one single social phenomenon are extremely complicated, these are acceptable, too.

<Exhibit 4: Fixed Effects (Within) Regression Results: coefficient estimates of per capita expenditures for contract services (\$)>
Note: 1. Standard errors are noted in parenthesis. Asterisks denote significance in two-tailed tests. Probability levels are denoted as follows: * for .10; ** for .05.
2. Data of financial variables are inflation-adjusted by being converted into 2005 constant dollars.
3. $F$ test that all $u_i=0$: $F(259, 2452)=13.14$ (Model 1), $F(259, 2451)=13.10$ (Model 2), $F(259, 2451)=13.14$ (Model 3), and $F(259,2451)=13.04$ (Model 4), Prob>$F=0.000$ for all the four $F$ statistics.
4. Hausman test with $H_0$ (difference in coefficients in the fixed and random effects model is not systematic), $\text{Chi}^2(9)=79.06$ (Model 1), $\text{Chi}^2(10)=76.96$ (Model 2), $\text{Chi}^2(10)=82.89$ (Model 3), and $\text{Chi}^2(10)=79.93$ (Model 4). For all these $\text{Chi}^2$ statistics, Prob>$\text{chi}^2=0.000$.

2) **Hypothesis 1 (a, b)**

Throughout the whole models, unemployment rate shows a solid influence on the per capita contract expenditures at 95 percent significance level. A 1 percent increase in unemployment rate is associated with a 4.775 ~5.047 per capita dollar increase in contract expenditures. Consequently, Hypothesis 1a that economic recessions are positively related to contracting is empirically supported, consequently disconfirming its alternative, Hypothesis 1b.

3) **Hypothesis 2**

Hypothesis 2 is also confirmed, as demonstrated at Model 2 employing total fund balances with 95 percent significance level. A 1 per capita dollar increase in total fund balances is related to .029 per capita dollar growth of contract expenditures. Looking at Model 3 and Model 4 reveals where the positive relationship between total fund balances and contract expenditures comes from: please note that the relationship turns negative at Model 3 despite its statistical insignificance, and eventually the changed relationship becomes statistically significant at Model 4 employing undesignated unreserved fund balances. Very interestingly, more discretionary types of fund balances show less contracting amounts. A 1 per capita dollar increase in undesignated fund balances turns out to yield a .019 per capita dollar reduction in contracting.
4) Controlled effects

(1) *Intergovernmental revenues*: Out of five measures of intergovernmental revenues, federal functional revenues and county functional revenues turn out to be statistically significant but with opposite signs. The results inform that a 1 per capita dollar increase in federal functional revenues increases about .17 per capita contract dollar. On the other hand, a 1 per capita dollar increase from county government reduces contracting by around .300 per capita dollar.

(2) *Government size, city size, and county wealth*: While city size (population) does not show statistical significance, the rest two turn out to have positive relationships at the 95 percent significance level. Nevertheless, the very small effect of per capita personal income of around .005 or .006 dollar is somewhat surprising. This seems to derive from the incompleteness of the measure observed at the county level.

5. Discussion and Concluding Remarks

1) Economic recession and contracting

The positive relationship between economic recessions and contract expenditures favors the government contracting perspective over the public finance perspective. That is, increasing fiscal pressure diverts city governments from internal production utilizing their own employees to external production through contracting with other government agencies and/or private organizations in order to cut production costs which tend to be more visible than transaction costs (Ferris and Graddy, 1994: 129).

In fact, the two seemingly opposing positions are built based on two different assumptions on sustaining an existing level of city services. I would argue that the government contracting literature basically assumes a choice situation where a city government holds a
minimum extent of fiscal resources, which can sustain an existing level of services during an economic shock. Therefore, it is a choice between internal and external production in an effort to maintain the existing level of services. In this case, it is expected that a decrease in internal production increases its alternative, external production.

On the other hand, the public finance literature focuses on a dire situation where the existing level of city services must be compromised since the city government has lost even a minimum extent of fiscal resources needed to maintain the existing service level. It is an inevitable choice of having to reduce general expenditures for service production, regardless of the types of production: internal or external. In this situation, it is predicted that both internal and external production are reduced, leading to a decrease in the general service expenditures.

This discussion, summarized at <Exhibit 5>, provides a useful insight on the regression results of this study. In other words, the positive relationship of recession on contracting implies that city governments have been striving to provide their residents with services without significant reductions even during economic difficulties. Maintaining an existing level of services is achieved through flexible transformation of a mode of service production from one to the other. As a matter of fact, this insight is compatible with Stein (1990) that “Contracting, along with other nondirect service modes, represents a potential opportunity to reduce the cost of government without significant reductions in the quality or level of services” (Stein, 1990: 84, italics by Cheongsin).

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Internal production</th>
<th>External production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government contracting</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Public finance</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
2) Discretionary fiscal resources and contracting

Overall, the hypothesized positive relationship of discretionary fiscal resources on contracting expenditures is empirically confirmed at Model 2 employing total fund balances. Considering that total fund balances consist of different portions, it would be interesting to identify which portion of them contributes most to the demonstrated relationship. Model 3 and Model 4 show that this relationship is partly driven by the reserved and, to a lesser extent, the designated unreserved parts of total fund balances. Externally imposed, i.e., reserved, or at least self-imposed, i.e., designated, restraints on resources seem to contribute to delivering services through contracting. As an illustration, City of Saratoga in California saves money into so-called “development deposits” in its reserved fund balances (City of Saratoga, 2009: A-20) and “Economic Uncertainty/Hillside Reserve” in its designated fund balances (City of Saratoga, 2009: A-21). It is conceivable that these reserves can become immediate sources of emergency spending when faced with a recession.

Put differently, more discretionary part of fund balances, referring to unreserved ones and undesignated ones, turned out to be spent less for contracting. Different roles of different types of total fund balances on general expenditure gap are already found in a previous study (Marlowe, 2005: 49). Our regression results suggest that 1) these different roles are also observed in their relations with contracting expenditures and 2) more discretion is related to less contracting. If discretionary money is not used for contracting, it can be spent for employees, equipment/land/building, and interest/principal of debts (California State Controller, 2005: 109).
3) Intergovernmental revenues

Two functional revenues turned out to be statistically significant but with opposite signs: federal functional and county functional. The former has a positive effect and the latter has a negative effect. Two primary sources of the former are Community Development Block Grant (CDBG) and Workforce Investment Act (WIA). It makes sense that characteristics of community development projects and workforce development projects may attract contracting. As a matter of fact, a CDBG website specifies “assistance to nonprofit entities for community development activities,” and “assistance to private, for profit entities to carry out economic development activities” as eligible activities which local governments can do with CDBG grants. Likewise, many of One Stop service centers which are closely related to WIA are run by third party contractors (Campbell, Lemp, Treiber, and their colleagues, 2006: 25).

Then, how can we explain the inverse relationship between the other functional revenues and contracting? A primary source of revenues from county government is “grants by county of state gasoline tax funds apportioned to the county by the State” (California State Controller, 2005: 90). The grants should be spent for improving the broadly defined area of public transportation. Although there is no immediate answer at hand on the opposite signs of the two functional revenues on the same dependent variable, one possibility might be differences in levels of discretion: namely, federal grants such as CDBG specify more requirements and guidelines, many of which favor contracting. On the other hand, revenues from county

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government might be less restrictive than federal grants in favoring contracting, as long as they are used for broadly defined transportation purposes. If this is correct, it is highly revealing that discretionary functional revenues and discretionary fund balances go less well with more contracting. Yet, the weakness of this speculation is that it cannot explain the statistical insignificance of general revenues from county and state governments, which are more discretionary than functional revenues.

This research was planned to contribute to the government contracting and public finance scholarship 1) by trying to reconcile their seemingly incompatible positions and 2) by suggesting resource dependence as one additional theoretical perspective. It is further hoped that future research incorporates other expenditure items, in addition to contracting, in order to rigorously test possible impacts of recessions and discretionary fiscal resources on government contracting.

References


