1 The Consumer Problem:

\[\max \sum_{t=0}^{\infty} \beta^t (u(c_t) - v(L_t))\]

\[r_t(k_t + b_t) + w_t L_t - k_{t+1} - b_{t+1} - c_t \geq 0\]

- \(k_0, b_0\) given; \(b\) are bonds;
  \(r_t, w_t\) are profits and wages, net of taxes.

First order conditions:

\[w_t u'(c_t) - v'(L_t) = 0\quad t = 0, 1, \ldots\]

\[u'(c_t) - \beta r_{t+1} u'(c_{t+1}) = 0\quad t = 0, 1, \ldots\]
The Optimal Taxation Problem:

Choose \( \{r_t, w_t, c_t, k_t, L_t, b_t\} \) to

\[
\max \sum_{t=0}^{\infty} (u(c_t) - v(L_t)) \beta^t
\]

subject to:

\[
u'(c_t) - \beta r_{t+1} u'(c_{t+1}) = 0,
\]

\[
w_t u'(c_t) - v'(L_t) = 0,
\]

\[
r_t (k_t + b_t) + w_t L_t - k_{t+1} - b_{t+1} - c_t \geq 0,
\]

\[
f(k_t, L_t) - c_t - k_{t+1} - G \geq 0,
\]

\[
\sum_{t=i}^{\infty} \beta^{t-i} (u(c_t) - v(L_t)) - V^D(k_t, b_t)
\]

\[
r_t \geq 0, \text{ for all } t = 0, 1, \ldots, \text{ with } k_0, b_0 \text{ given.}
\]
3 Lagrangean:

$$\sum_{t=0}^{\infty} \beta^t u(c_t) - v(L_t)$$

$$+ \lambda_t \left( u'(c_t) - \beta r_{t+1} u'(c_{t+1}) \right)$$

$$+ \mu_t \left( w_t u'(c_t) - v'(L_t) \right)$$

$$+ \eta_t \left( k_{t+1} + c_t + G - f(k_t, L_t) \right)$$

$$+ \xi_t \left( r_t(k_t + b_t) + w_t L_t + G ight)$$

$$- f(k_t, L_t) - b_{t+1}$$

$$+ \kappa_t r_t$$

$$+ \sum_{i=1}^{\infty} \gamma_i \left( \sum_{t=i}^{\infty} \beta^{t-i} (u(c_t) - v(L_t)) - V^D(k_t, b_t) \right)$$
wrt $k_t$:
\[ \gamma_t \beta^{-t} V^D_k(k_t, b_t) = -\eta_t f_K(k_t, L_t) + \beta^{-1} \eta_{t-1} + \xi_t (r_t - f_K(k_t, L_t)) \]

This condition can be expressed as:
\[ (\xi_t + \eta_t)(r_t - f_K(k_t, L_t)) = \gamma_t \beta^{-t} V^D_k(k_t, b_t) - \beta^{-1} (-\eta_t + \eta_{t-1}) \]

(1)

The foc with respect to $c_t$ is:
\[ u''(c_t)(\lambda_t - \lambda_{t-1} r_t + \mu_t w_t) + u'(c_t) + \eta_t = -\beta^{-t} (\gamma * \beta)_t u'(c_t) \]

(2)

where we define $(\gamma * \beta)_t = \sum_{i=1}^{t} \gamma_i \beta^{t-i}$.
The foc wrt $b_t, r_t, w_t, L_t$ are:

$$-\xi_{t-1} + \xi_t \beta r_t = \gamma_t \beta^{-t} V^D_b(k_t, b_t), \quad (3)$$

$$-\lambda_{t-1} u'(c_t) + \xi_t (k_t + b_t) + \kappa_t = 0, \quad (4)$$

$$\mu_t u'(c_t) + \xi_t L_t = 0, \quad (5)$$

$$(\xi_t + \eta_t) (w_t - f_L(k_t, L_t)) \quad (6)$$

$$-\mu_t v''(L_t) - (\eta_t + u'(c_t)) w_t$$

$$= \beta^{-t} (\gamma * \beta)_t v'(L_t)$$

The above equations, together with the initial conditions and transversality conditions, define the system to be studied.
5  Value of a Steady State:

Fix $k$, and find the value of keeping $k$ as a steady state, at equilibrium:

$$W(k) = \max u(c) - v(L)$$

subject to:

$$k + c + G = f(k, L)$$  \hspace{1cm} (7)

$$(\beta^{-1} - 1)b + k\beta^{-1} + \left(\frac{v'(L)}{u'(c)}\right)L + G = f(k, L)$$  \hspace{1cm} (8)

where we have used:

$$r\beta = 1, \quad w = \left(\frac{v'(L)}{u'(c)}\right).$$  \hspace{1cm} (9)
In addition, if the incentive constraint is binding:

$$(1 - \beta)^{-1} \left( u \left( (f(k, l) - G - k) - v(L) \right) - V^D(k, b) \right) = 0 \quad (10)$$

If not the condition is replaced by the Chamley-Judd result:

$$r = \beta^{-1} = f_k(k, l) \quad (11)$$

**Definition 1**: Let

$$x(b) = \{ r(b), w(b), c(b), k(b), L(b) \}$$

satisfy 7, 8, 9 and 10 (11).

Then it is a candidate steady state.
RESULT: Suppose that the constrained capital stock $k^*$ is larger than $k_g$: then capital is *subsidized* at the steady state.

Note: $\beta f_k(k_g, L(k_g)) = 1; \beta r = 1$. The result follows from showing that

$$f_k(k_g, L(k_g)) > f_k(k_2, L(k_2))$$

because $k_2 > k_g$ and because it can be shown that $L(k)$ is decreasing on $(k_g, k_2)$. 

6 Lagrange Multipliers:

At steady state, one finds, (multiplier for budget constraint):

\[ \xi_t = (1 + a)^t \]

and (multiplier for incentive constraints)

\[ \gamma_t = \xi_t \beta^t \]

- \( \gamma_t \geq 0 \), so \( \xi_t \) constant sign;
- \( \xi_t \in \ell^1 \), so \( (1 + a) \in (0, \frac{1}{\beta}) \).
Linear utility: (identifies $L$ as largest)

$$W(k) = u(c) - v(L) = c - v(L)$$

**RESULT:** If the defection value function $V^D$ is strictly concave, and

$$\{ k : V^D(k) \leq \frac{W(k)}{1 - \beta} \} = [k_1, k_2],$$

and $k_g > k_2$, then the only constrained steady state which satisfies the necessary condition for optimality is $k_2$. ($k^*$ above)
7 An Example

\[ u(c) - v(L) = c - (1 + e)^{-1} L^{1+e} \]

\[ f(k, L) = A(\epsilon) k + B L + \epsilon k^\alpha L^{1-\alpha}; \]

\[ A(\epsilon) = \beta^{-1} - \varphi(\epsilon); \quad (A = \beta^{-1} - \epsilon^{7/8}) \]
8 Deviation (Extreme):

Budget constraints and feasibility gives

\[ \varepsilon f(k, l) + Ak + BL = G + wL + rk \]

or, using \( e = 1, w = V'(L) = L \), and the deviation \( r = 0 \), we get:

\[ L = A \frac{k}{L} + B - \frac{G}{L} \]

which, given \( k \) has one positive solution if \( Ak \geq G \), and two if \( Ak < G \); the two solutions are:

\[ L_{2(1)}(k) = \frac{B + (B^2 + (-)4[Ak - G])^{1/2}}{2}. \]
\( L_2(k) \) is chosen (it is the better one \( u \) is linear) and we obtain the value of deviation:

\[
V^D(k) = A k + B L_2(k) - G - \left(\frac{1}{2}\right) L_2(k)^2 + \frac{\beta}{1 - \beta} \left[ B L_2(0) - G - \left(\frac{1}{2}\right) L_2(0)^2 \right].
\]
Let $e = 1, \epsilon = 0$.

**RESULT:** For both steady states $k = 0$ and $k = k^*$, $1 + a \in (0, \beta^{-1})$.

**RESULT:** For values of $G$ large enough, and $A, k_0$ small enough, the optimal path does not converge to $k^*$.

**RESULT:** For $\epsilon$’s small, $k^*(\epsilon) > k_g(\epsilon)$ and taxes on capital are negative.
9 \hspace{1em} \text{A PARAMETRIZED FAMILY:}

\[ f(k, L) = A(\epsilon)k + BL + \epsilon k^\alpha L^{1-\alpha}; \]
\[ A(\epsilon) = \beta^{-1} - \epsilon^r, \quad r = 7/8; \quad \alpha = 0.33; \]
\[ B = 3; \]
\[ \beta = 0.95; \]
\[ G = 2 \]
Figure 4:

NOTE: \( k_g \in (0, k_1) \) or \( k_g \in (k_1, k_2) \)

If \( k_g \in (k_1, k_2) \), both \( k_1 \) or \( k_2 \) are admissible as SS.

If \( k_g \in (0, k_1) \), only \( k_2 \) is admissible as SS.
<table>
<thead>
<tr>
<th>$e$</th>
<th>$\epsilon$</th>
<th>$k_g$</th>
<th>$k_1$</th>
<th>$k_2$</th>
<th>$L(k_g)$</th>
<th>$L(k_1)$</th>
<th>$L(k_2)$</th>
<th>$TAX(k)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.15</td>
<td>.0001</td>
<td>.0001</td>
<td>.00001</td>
<td>6.05</td>
<td>1.6678</td>
<td>1.6678</td>
<td>1.6676</td>
<td>.01033</td>
</tr>
<tr>
<td>1.15</td>
<td>.001</td>
<td>.0087</td>
<td>.0087</td>
<td>10.1</td>
<td>1.6683</td>
<td>1.6681</td>
<td>1.6428</td>
<td>.00876</td>
</tr>
<tr>
<td>1.15</td>
<td>.002</td>
<td>.1000</td>
<td>.0236</td>
<td>24.4</td>
<td>1.6688</td>
<td>1.6686</td>
<td>1.5228</td>
<td>.00700</td>
</tr>
<tr>
<td>1.15</td>
<td>.0025</td>
<td>.1043</td>
<td>.0324</td>
<td>—</td>
<td>1.6689</td>
<td>1.6689</td>
<td>—</td>
<td>.00620</td>
</tr>
<tr>
<td>1.00</td>
<td>.00001</td>
<td>.0046</td>
<td>.0002</td>
<td>5.7</td>
<td>2.0000</td>
<td>2.0000</td>
<td>1.9995</td>
<td>.00526</td>
</tr>
<tr>
<td>1.00</td>
<td>.001</td>
<td>.1053</td>
<td>.0128</td>
<td>8.5</td>
<td>2.0005</td>
<td>2.0003</td>
<td>1.9827</td>
<td>.00736</td>
</tr>
<tr>
<td>1.00</td>
<td>.002</td>
<td>.1199</td>
<td>.0340</td>
<td>13.2</td>
<td>2.0011</td>
<td>2.0009</td>
<td>1.9471</td>
<td>.00575</td>
</tr>
<tr>
<td>1.00</td>
<td>.0025</td>
<td>.1250</td>
<td>.0464</td>
<td>17.7</td>
<td>2.0013</td>
<td>2.0012</td>
<td>1.9077</td>
<td>.00497</td>
</tr>
<tr>
<td>.500</td>
<td>.00001</td>
<td>.1665</td>
<td>.00024</td>
<td>4.6</td>
<td>7.4641</td>
<td>7.4641</td>
<td>7.4640</td>
<td>.00333</td>
</tr>
<tr>
<td>.500</td>
<td>.001</td>
<td>.3933</td>
<td>.1736</td>
<td>5.3</td>
<td>7.4658</td>
<td>7.4657</td>
<td>7.4586</td>
<td>.00172</td>
</tr>
<tr>
<td>.500</td>
<td>.002</td>
<td>.4477</td>
<td>.4428</td>
<td>6.3</td>
<td>7.4677</td>
<td>7.4677</td>
<td>7.4519</td>
<td>.00003</td>
</tr>
<tr>
<td>.500</td>
<td>.0025</td>
<td>.5933</td>
<td>.5933</td>
<td>6.9</td>
<td>7.4687</td>
<td>7.4686</td>
<td>7.4474</td>
<td>-.00078</td>
</tr>
<tr>
<td>.450</td>
<td>.00001</td>
<td>.2129</td>
<td>.00039</td>
<td>4.3</td>
<td>9.8283</td>
<td>9.8283</td>
<td>9.8382</td>
<td>.00285</td>
</tr>
<tr>
<td>.450</td>
<td>.001</td>
<td>.5179</td>
<td>.3028</td>
<td>5.0</td>
<td>9.8307</td>
<td>9.8306</td>
<td>9.8245</td>
<td>.00100</td>
</tr>
<tr>
<td>.450</td>
<td>.002</td>
<td>.5895</td>
<td>.7902</td>
<td>5.6</td>
<td>9.8333</td>
<td>9.8332</td>
<td>9.8207</td>
<td>-.0007</td>
</tr>
<tr>
<td>.450</td>
<td>.0025</td>
<td>.6147</td>
<td>1.073</td>
<td>5.9</td>
<td>9.8346</td>
<td>9.8342</td>
<td>9.8181</td>
<td>-.0016</td>
</tr>
</tbody>
</table>

**TABLE 1**
• Increasing $\epsilon$ (curvature) causes subsidy at $k_2$ and the tax at $k_1$ to go up.

• As labor becomes more inelastic ($e$ increases) subsidies at $k_2$ increase: it is easier to finance capital because with inelastic labor the distortion of labor taxes is lower.

• However since $k_1$ (and $\frac{k_1}{L(k_1)}$) declines while the marginal product at $k_g$ is $\beta^{-1}$, capital taxes at $k_1$ increase.
10 Productive Public Capital and Optimal Taxes Without Commitment

Jess Benhabib, Aldo Rustichini
Andres Velasco
TECHNOLOGY

- $k$ is the private good;
  - $g$ is the public good;
  - $y$ is the output, equal to:

\[
A (a(1 - \tau)^{-\rho} k^{-\rho} + (1 - a) g^{-\rho})^{-\frac{1}{\rho}} + Bk
\]

The public good is produced in quantity:

\[
g = \tau k.
\]
Social Rate Of Return on Capital:

\[ y = A k \left( a (1 - \tau)^{-\rho} + (1 - a) \tau^{-\rho} \right)^{-\frac{1}{\rho}} + B k \]
\[ \equiv (\phi_1(\tau) + B) k \equiv \phi(\tau) k. \]

Social rate of return: \( \phi(\tau) \)

Private Return on Capital:

\[ \frac{\partial y}{\partial k} \equiv R(\tau) = A a \phi_1(\tau)^{1+\rho} (1 - \tau)^{-\rho} + B \]

Furthermore:

\[ R(\tau) \leq \phi(\tau) \]
The Consumer:

\[ \sum_{t=0}^{\infty} \left( \frac{\sigma}{\sigma - 1} \right)^{\frac{\sigma-1}{\sigma}} c_t^\sigma \beta^t \]

Budget Constraint

\[ k_{t+1} = R(\tau_t)k_t + M_t - c_t = \phi(\tau_t)k_t - c_t \]

where \( M_t \) is a government transfer.
The Equilibrium

Fix a sequence of tax rates. At equilibrium:

\[ V(k_0, \tau) \]

\[ = \left( \frac{\sigma}{\sigma - 1} \right) (k_0)^{\frac{\sigma - 1}{\sigma}} \left( \phi(\tau_0) \right)^{\frac{\sigma - 1}{\sigma}} h(\tau_1, \tau_2, \ldots). \]

\[ (\phi(\tau_0))^{\frac{\sigma - 1}{\sigma}} h(\tau_1, \tau_2, \ldots) \equiv H(\tau_0, \tau_1, \ldots). \]

\[ H^*(\tau) \equiv H(\tau, \tau, \ldots). \]
Derivation

The first order condition of the agent

gives:

\[ c_{t+1} = c_t (\beta R(\tau_{t+1}))^\sigma \]  \hspace{1cm} (12)

Iteration of the feasibility condition \( k_{t+1} = \phi(\tau_t)k_t - c_t \) implies

\[ c_0 + \sum_{t=1}^{T} c_t \prod_{s=1}^{t} \phi^{-1}(\tau_s) + \prod_{s=1}^{T} \phi^{-1}(\tau_s)k_{T+1} = \phi(\tau_0)k_0. \]  \hspace{1cm} (13)

As is conventional we assume that

\[ \lim_{T \to \infty} \prod_{s=1}^{T} \phi^{-1}(\tau_s)k_{T+1} = 0 \]  \hspace{1cm} (14)

so that (13) becomes

\[ c_0 + \sum_{t=1}^{\infty} c_t \prod_{s=1}^{t} \phi^{-1}(\tau_s) = \phi(\tau_0)k_0 \]  \hspace{1cm} (15)
Iterating the first order conditions for the agent we get

\[ c_t = c_0 \prod_{s=1}^{t} (\beta R(\tau_s))^\sigma \]  \hspace{1cm} (16)

which, substituted into 15 gives

\[ c_0 \left( 1 + \sum_{t=1}^{\infty} \prod_{s=1}^{t} (\beta R(\tau_s))^\sigma \phi^{-1}(\tau_s) \right) = \phi(\tau_0) k_0 \]  \hspace{1cm} (17)

If we now substitute the 16 into the expression for the utility of the agent we get that the utility from an initial capital \( k_0 \) and a tax rate sequence \( \tau = (\tau_0, \tau_1, \ldots) \), denoted by \( V(k_0, \tau) \), is

\[
V(k_0, \tau) = \left( \frac{\sigma}{\sigma - 1} \right) c_0^{\frac{\sigma - 1}{\sigma}} \left( 1 + \sum_{t=1}^{\infty} \prod_{s=1}^{t} (\beta^\sigma (R(\tau_s))^{\sigma - 1}) \right)
\]  \hspace{1cm} (18)
Now we can use the equation 17 to substitute for \( c_0 \), and obtain the value to the agent in terms of \( k_0 \) and \( \tau \) only. To lighten notation, we introduce:

\[
X(\tau_1, \ldots) \equiv \left(1 + \sum_{t=1}^{\infty} \prod_{s=1}^{t} (\beta R(\tau_s))^{\frac{\sigma}{\sigma}} \phi^{-1}(\tau_s) \right)^{\frac{1-\sigma}{\sigma}}
\]

(19)

and

\[
Y(\tau_1, \tau_2, \ldots) \equiv \left(1 + \sum_{t=1}^{\infty} \prod_{s=1}^{t} (\beta^{\sigma} (R(\tau_s))^{\sigma-1}) \right)
\]

(20)

so that we define

\[
h(\tau_1, \tau_2, \ldots) \equiv X(\tau_1, \tau_2, \ldots)Y(\tau_1, \tau_2, \ldots)
\]

(21)
Now we can write

$$V(k_0, \tau) = \left( \frac{\sigma}{\sigma - 1} \right) (k_0)^{\frac{\sigma-1}{\sigma}} (\phi(\tau_0))^\frac{\sigma-1}{\sigma} h(\tau_1, \ldots).$$

(22)

as we have in the text.
Optimal Tax with Commitment

$$\lim_{m \to \infty} R'(\tau^*_m) = 0.$$  

FOC wrt $\tau_m$ of $X$ and $Y$ are:

$$\frac{\partial X}{\partial \tau_m} = \frac{1 - \sigma}{\sigma} X \frac{1-2\sigma}{1-\sigma} \sum_{t=m}^{\infty} \prod_{s=1, s \neq m}^{t} (\beta R(\tau_s))^{\sigma} \phi^{-1}(\tau_s)$$

$$\times \begin{pmatrix} \sigma \phi(\tau_m) (R(\tau_m))^{\sigma-1} R'(\tau_m) \\ -\phi'(\tau_m) (R(\tau_m)^{\sigma}) \end{pmatrix}$$

$$\frac{\partial X}{\partial \tau_m} = \frac{1 - \sigma}{\sigma} X \frac{1-2\sigma}{1-\sigma} \sum_{t=m}^{\infty} \left( \prod_{s=1}^{t} (\beta R(\tau_s))^{\sigma} \phi^{-1}(\tau_s) \right)$$

$$\left( \sigma \frac{R'(\tau_m)}{R(\tau_m)} - \frac{\phi'(\tau_m)}{\phi(\tau_m)} \right)$$
For the $Y$ term we get

$$\frac{\partial Y}{\partial \tau_m} = \sum_{t=m}^{\infty} \prod_{s=1, s \neq m}^{t} (\beta^\sigma R(\tau_s)^{\sigma-1})$$

$$= (\sigma - 1)(R(\tau_m)^{\sigma-2} R'(\tau_m))$$

or

$$\frac{\partial Y}{\partial \tau_m} = \sum_{t=m}^{\infty} \prod_{s=1}^{t} (\beta^\sigma R(\tau_s)^{\sigma-1})(\sigma - 1) \left( \frac{R'(\tau_m)}{R(\tau_m)} \right)$$

We can now substitute in the equation giving the value to the agent:
\[
\frac{\partial V(k_0, \tau)}{\partial \tau_m} = \left( \frac{\sigma}{\sigma - 1} \right) \left( \phi(\tau_0) k_0 \right)^{\frac{\sigma - 1}{\sigma}} \times \\
\left( Y^{1-\sigma} X^{1-2\sigma} \sum_{t=m}^{\infty} \left( \prod_{s=1}^{t} (\beta R(\tau_s))^\sigma \phi^{-1}(\tau_s) \right) \right) \\
\left( \sigma \frac{R'(\tau_m)}{R(\tau_m)} - \frac{\phi'(\tau_m)}{\phi(\tau_m)} \right) \\
+ \left( \frac{\sigma}{\sigma - 1} \right) \left( \phi(\tau_0) k_0 \right)^{\frac{\sigma - 1}{\sigma}} \\
\left( X \sum_{t=m}^{\infty} \left( \prod_{s=1}^{t} (\beta^\sigma R(\tau_s)^{\sigma - 1})(\sigma - 1) \frac{R'(\tau_m)}{R(\tau_m)} \right) \right)
\]

Now we assume that \( \beta^\sigma R(\tau_s)^{\sigma - 1}(\tau_s) < 1 \) (it can be shown this condition is necessary for the value of the program to be bounded and for an optimum to exist). Therefore,
\[
\lim_{m \to \infty} \sum_{t=m}^{\infty} \left( \frac{t}{\prod_{s=1}^{t} (\beta R(\tau_s))^{\sigma} \phi^{-1}(\tau_s)} \right) = 0
\]  
(25)

so that

\[
\lim_{m \to \infty} \frac{\partial V(k_0, \tau)}{\partial \tau_m} = \left( \left( \frac{\sigma}{\sigma - 1} \right) \left( \phi(\tau_0)k_0 \right)^{\frac{\sigma-1}{\sigma}} \right) \left( X \sum_{t=m}^{\infty} \prod_{s=1}^{t} (\beta^{\sigma} R(\tau_s)^{\sigma-1})(\sigma - 1) \frac{R'(\tau_m)}{R(\tau_m)} \right)
\]

This, together with the optimality condition

\[
\frac{\partial V(k_0, \tau)}{\partial \tau_m} = 0
\]  
(26)

implies that

\[
\lim_{m \to \infty} R'(\tau_m) = 0,
\]  
(27)

as claimed.
The Third Best

$$\max_{\tau=(\tau_0, \tau_1, \ldots)} V(k_0, \tau)$$

$$V^C(k_t, \tau) \geq V^D(k_t) \text{ for all } t \geq 1$$

This equivalent to the following simple problem, which is independent of the initial capital stock:

$$\max_{\tau=(\tau_0, \tau_1, \ldots)} \left( \frac{\sigma}{\sigma - 1} \right) H(\tau_0, \tau_1, \ldots)$$

subject to:

$$\left( \frac{\sigma}{\sigma - 1} \right) H(\tau_t, \tau_{t+1}, \ldots) \geq \left( \frac{\sigma}{\sigma - 1} \right) H^*(\tau_p)$$

for all $$t \geq 1.$$
11 Existence

**Proposition** For any $\sigma \geq 0$ and any $\rho \in [-1, +\infty]$, if $\beta^\sigma R(\tau)^{\sigma-1} < 1$ for every $\tau$, then:

(1) a second best optimal tax exists;
(2) a third best (incentive compatible) optimal tax exists
Figure 5: $\rho > 0$

$\rho < 0$
12 Calibration and Tax Rates

\[ A = 1, \quad B = 1, \quad \sigma = 0.5, \quad \beta = 0.95 \]

\[ y = Ak \left( a(1 - \tau)^{-\rho} + (1 - a)\tau^{-\rho} \right)^{-\frac{1}{\rho}} + Bk \]

First Number: Second Best; Second Number: Third Best; SUS: Second best IC
<table>
<thead>
<tr>
<th>$\rho \backslash a$</th>
<th>0.3</th>
<th>0.5</th>
<th>0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.5</td>
<td>.303, .379</td>
<td>.146, .293</td>
<td>.040, .112</td>
</tr>
<tr>
<td>-0.1</td>
<td>.694, .697</td>
<td>.494, .497</td>
<td>.295, .297</td>
</tr>
<tr>
<td>0.1</td>
<td>.705, .702</td>
<td>.504, .502</td>
<td>.304, .302</td>
</tr>
<tr>
<td>0.5</td>
<td>.803, .748</td>
<td>.641, .578</td>
<td>.469, .408</td>
</tr>
<tr>
<td>2.0</td>
<td>.729, .697</td>
<td>.654, .611</td>
<td>.573, .521</td>
</tr>
<tr>
<td>8.0</td>
<td>.606, SUS</td>
<td>.582, SUS</td>
<td>.558, .556</td>
</tr>
<tr>
<td>10.0</td>
<td>.591, SUS</td>
<td>.578, SUS</td>
<td>.556, SUS</td>
</tr>
</tbody>
</table>