1 Dutch paper - no default - Steady state

I'm working with 35 variables (the ones from the code plus g). I can solve explicitly for 18 of them:

$$
\begin{aligned}
\Lambda &= \pi = \pi^* = q^k = a = \xi = \mathcal{D} = 1 \\
1 + r^n &= 1 + r^d = 1/\beta \\
m &= (\varepsilon - 1)/\varepsilon \\
n^g &= \tau^n = \tilde{n}^g = \tilde{\tau}^n = 0 \\
r^k &= r^b = r^d + \Gamma \\
w &= (1-\alpha) m^{\frac{1}{1-\alpha}} \left(\frac{\alpha}{r^k + \delta} \right)^{\frac{\alpha}{1-\alpha}} \\
q^b &= \frac{r_c}{1 + r^b - \rho}
\end{aligned}
$$

I also know that:

$$
\begin{aligned}
i/k &= \delta \\
G/y &= 0.2 \\
i/y &= 0.2 \\
q^b b/y &= 2.4 \\
\frac{k}{h} &= \frac{\alpha}{1-\alpha} \frac{w}{r^k + \delta}
\end{aligned}
$$

Note that the equations here above imply c/y is known:

$$
\begin{aligned}
c &= y - G - i \\
\frac{c}{y} &= 1 - 0.2 - 0.2 = 0.6.
\end{aligned}
$$

First I need to solve for h. Using both of the equations that characterize the labor market I have:

$$
h = \left[\frac{(1-\alpha)(1 - v\beta) m}{\Psi (1 - v) c/y} \right]^{\frac{1}{\varphi + 1}}.
$$

Then I have:

$$\begin{aligned}
k &= \frac{k}{h} \times h \\
y &= k^{\alpha} h^{1-\alpha} \\
i &= \delta k \\
g &= G = 0.2 * y \\
c &= \frac{c}{y} * y \\
\lambda &= \frac{1 - v\beta}{1 - v} \frac{1}{c} \\
NUM &= \frac{\lambda m y}{1 - \beta\psi} \\
DEN &= NUM/m \\
b &= 2.4y/q^b
\end{aligned}$$

Also, from the gov't budget constraint, I would get

$$\begin{aligned}
\tau &= G + r^b q^b b \\
&\implies \frac{\tau}{y} = 0.2 + 2.4\left(r^d + \Gamma\right)
\end{aligned}$$

and I could solve for τ.

So far I've "solved" for 29 variables, including h. I'm still missing 6, that would come from the financial intermediaries's FOCs. From Eq.(12) and the formulas above, I can solve for p:

$$p = \left(\frac{k + q^b b}{y}\right) y.$$

With p and Eqq.(15) and (13), I can solve for n and ϕ:

$$\begin{aligned}
n &= \theta\left[\Gamma k + \Gamma q^b b + \frac{1}{\beta} n\right] + \chi p \\
&\implies n = \frac{\theta\Gamma\left(k + q^b b\right) + \chi p}{1 - \theta/\beta}
\end{aligned}$$

and

$$\phi = p/n.$$

All of the other remaining variables depend on Ω:

$$
\begin{aligned}
\eta &= \Omega\left(1 + r^d\right) = \Omega/\beta \\
v^b &= \Omega\Gamma \\
\phi &= \eta/\left(\lambda_{param} - v^b\right) = \frac{\Omega}{\beta}\frac{1}{\lambda_{param} - \Omega\Gamma}
\end{aligned}
$$

and I can use this last equation to solve for Ω:

$$
\begin{aligned}
\phi\beta\left(\lambda_{param} - \Omega\Gamma\right) &= \Omega \\
\Omega &= \frac{\phi\beta\lambda_{param}}{1 + \phi\beta\Gamma}.
\end{aligned}
$$